NUMBER 25 $1.50

THE SPACE GAMER

for creative adventures

SPECIAL
STELLAR CONQUEST
ISSUE

THE SPACE GAMER

November–December, No.25, 1979

IN THIS ISSUE

SPECIAL STELLAR CONQUEST ISSUE

5 *STELLAR CONQUEST*
Third Time Around
* *Howard Thompson*

7 *INIMICAL WAYS TO PLAY STELLAR CONQUEST*
Strategies for a classic
* *James G. Branaum*

10 *EXPANDING YOUR STELLAR CONQUESTS*
Another look at Stellar Conquest
* *Frank B. Weir, Jr.*

12 *ORDER OUT OF CHAOS*
Benefit Cost Analysis in Wargaming
* *Glenn L. Williams*

16 *AGAIN, HARMONIOUS FISTS*
More Far East fighting
* *David James Ritchie*

20 *THE CASE OF THE MISSING MICROS*
A short Story
* *Tim Solis*

21 *CYBORG*
A review
* *W. G. Armintrout*

22 *STAR FLEET BATTLES*
A review
* *Kenneth W. Burke*

23 *EVERYDAY LIFE IN TFT*
How about a mall over there?
* *Martin Halbert*

26 *THE UNWRITTEN RULES OF RIVETS*
Robot strategies
* *Roland Parenteau*

DEPARTMENTS

WHERE WE'RE GOING 3
1978 FEEDBACK RESULTS 18
NEWS & PLUGS 27
LETTERS 30

ART IN THIS ISSUE

Robert Phillips ..... cover
Roderick Phillips 3
Will McLean 6, 7, 10, 28
Robert Manns 11
Aaron Arocho 17
Mitch O'Connell 21, 23
Richard Mather 22
Eric Hotz 24
Gene Woodley 26
Ken Mitchroney 27
Dave Deitrick 30

C. Ben Ostrander
editor

Howard Thompson
publisher

Karol Sandberg
Donna Baker
copy editors

Steve Jackson
contributing editor

Robert Taylor
news editor

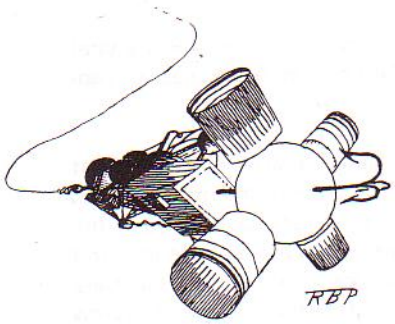
Kim Falke
Vicki Fischer
subscriptions

THE SPACE GAMER is published bi-monthly by Metagaming. 3100-A Industrial Terrace, Austin, TX 78759. SUBSCRIPTION information, changes of address, orders, and all mailed material to Metagaming, P.O. Box 15346, Austin, TX 78761.

All material copyright © 1979 by THE SPACE GAMER. All rights reserved for material accepted for publication unless initially specified and agreed otherwise.

News items and product announcements subject to editorial whim. SUBSCRIPTIONS: six issues, $8; twelve issues, $15. Base rate for unsolicited manuscripts is one cent per word; they must be typed, double spaced, and contain return postage. Base rate for art is $20 per average page size; interior art should be black ink on heavy white paper. Second class postage paid at Austin, Texas.

Where We're Going



STELLAR CONQUEST and GODSFIRE have now been re-issued as boxed games. Unlike the first delivery of boxes, these are compatible with our components. Also, these boxes are correctly sized; covers are true full-color. The counters are excellent quality printing and cutting. That's at least some consolation for an extra six months' wait. By the time you read this, your local stores ought to have STELLAR CONQUEST and GODSFIRE available.

THE FANTASY TRIP: IN THE LABYRINTH is now in the production phase. Before Steve Jackson left for NorthAmericon, rules had been typeset. There is one problem. We'd originally expected 60-80 pages of material for the rules. What we have will probably work out to 140-150 pages. The component budget will have to give somewhere else to accomodate this wealth of material.

Despite length, gamers won't be faced with unplayability or tedious complexity. Most of the rules are actually tables of creatures, magic spells, fighter talents and stocking for the part of the labyrinth provided. Actual rules for play are proportionally small and in some cases, rehash necessary portions of MELEE and WIZARD.

Don't order TFT: ITL yet. Price still isn't certain, though under $20 is the target. Release date hasn't been set.

The next two Micros are HOT SPOT and a double title, ANNIHILATOR/ONEWORLD. Both will retail for $2.95. HOT SPOT is a fast playing game with a few interesting wrinkles. A fleet fleeing the Terran Empire needs refueling. The only available source is the molten mining world of Chiros. The raid must capture some of the floating production Crustals to save the fleet. The defender has control of Crustal movement and the attacker's units must succeed before melting.

ANNIHILATOR concerns a demolition team's effort to destroy the central brain of a cybernetic space fort. The simulation includes landing, break-in, battle in corridors with robots and repair units, and nuclear charges. ONEWORLD allows players to determine which of two gods will dominate. Each has his children, in the aspects of Stone, Blade and Fog. The Singing Grasses, Towers of Balance, Crystal Pylons and Faults of Chaos all play a role in the struggle. ONEWORLD combat is diceless.

ANNIHILATOR/ONEWORLD were each a bit light for separate Micro production, so we decided to put them into one package. We'd rather give you a two for one and have a good seller than give you less than the usual quality Micro.

METAGAMING is expanding into historical MicroGames. One such game about the Second World War will be ready in early 1980. Yeh, it's an overworked area, but there aren't many games which cover the entire European theatre and can be played to completion in a few hours. This is NOT a monster game, just a playable, fun game. Various scenarios will allow the system to function for conflicts anywhere in the 1930-50 time span. A second historical Micro being planned will be about Rommel's Afrika Korps. The scale is unit tactical, but fairly clean and simple.

A lunar tactical game is also in the works. It includes an alien scenario. Steve has already roughed-out an infantry combat game based in the OGRE universe. You may have thought the infantry in OGRE dull; Steve thought otherwise, and you will too.

Now that IN THE LABYRINTH is near completion, the backlog of MicroQuests based on THE FANTASY TRIP will begin to flow. Watch for them.

Planned is a sequel to our summer hit, INVASION OF THE AIR EATERS. This untitled game will cover combat in the inner solar system with separate maps for a number of planets and moons. Also included will be an inner solar system orbit map for planet and spaceship movement. Jupiter is a base for the Air Eaters. There may be some multi-player scenarios developed by publication time.

METAGAMING's space role-playing system is now well along in playtesting. The method of handling characters has undergone a major revision, giving them more life. Expect to see the first Micro in this system to be published in early 1980. The gamemaster segments are being designed concurrently with the character combat and spaceship modules. We don't want the long delay that hit the release of the gamemaster's material for THE FANTASY TRIP.

WIZARD, DEATH TEST, OLYMPICA, and G.E.V. will all be reprinted soon. You'll see the new editions after Christmas. OLYMPICA will get some clean-up on rules and a new map. If you liked it before, then the new edition will be worth your time. Two of the other three reprints will feature new covers and some minor copy changes. Those of you who liked the Roger Stine cover on the last edition of MELEE will appreciate his new effort for WIZARD.

Keith Gross, who brought us INVASION OF THE AIR EATERS and ICE WAR, has joined Metagaming's staff full time as designer and games editor. This should mean an increased and steady flow of games to market. Now that we've got a competent box and counter manufacturer, delays of that type will not be a problem. Of course, there will always be other problems. . . . .

THINKING GAMES

Our recent efforts to publish material for thought-provoking insight were poorly received. Readers didn't like the psychology piece or the recent "editorial". *Response* was moderately well received. Perhaps THE SPACE GAMER shouldn't attempt to be more than entertainment for gamers. There is certainly more profit in entertainment than in thought. You'll see more of *Response* in the future, but no "thought" pieces.

CROWDED GAMES

Every time I pick up a new issue of a game related magazine, there seem to be more and more new firms. There are board game firms, miniature firms and subsidiary product firms. Many have gone out of business in the last year or have otherwise been revamped. What's surprising is the flood of new firms when few of the old really make any profit.

Heritage Models (see News & Plugs) is one of the three largest firms in our industry. Yet, without the change in ownership, it would have failed. There are a lot of firms with good, growing sales but little in the way of profits. Why do so many people want to get into this business? Beats the hell outa me. If Metagaming had to start now, we wouldn't make it. Many of the newer efforts won't either. The exceptions will be those who have good financing. They will survive for a time with mediocre products, the best they seem capable of producing.

Frankly, I've lost track of what's happening in the industry. I know what Metagaming is doing, plus a few of the big firms' activities. Beyond that, it's all a haze. Something unique and truly great could come out and years go by before I knew it. What will happen is more fragmenting of gaming interests. Once, you could own every game published. Then you had to concentrate on historical or role playing or whatever. It's going to fragment even further in the 80's. Price range, age range and game appeal will all become criteria for splintered interests.

Well, that's it for this time. Our fall has been super busy in all areas. The box problem is now solved. A back log of projects that seem to have been hanging forever is about to bust loose. Those who've been with us the whole way can stick around for 1980. After all, Metagaming brought you the first science fiction and fantasy game magazine, the innovation of MicroGames, and the art standards for the industry. Maybe we've got a few more things up our sleeves. . . . .

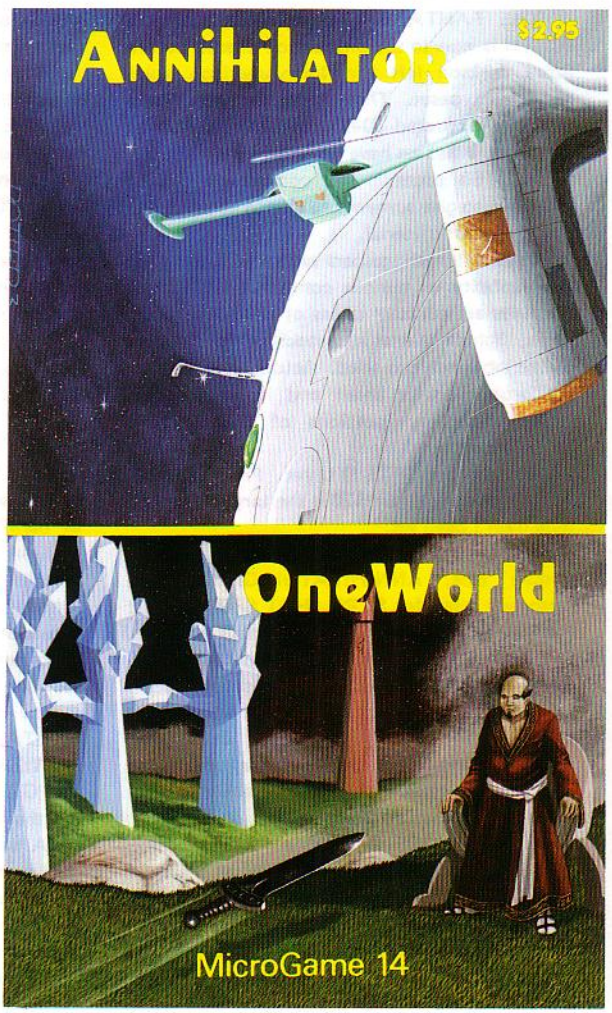
Howard Thompson

WAR IN HELL.....

Chiros was a molten, planetary hell. It was also a vital production center that the Technocrat rebels had to capture.

HOT SPOT is a tactical game about the Technocrat raid on Chiros. The Ziegler Corporations maintains fragile, floating platforms called crustals, that move through the molten rock. The crustals are defended by infantry and hovercraft. The technocrat attackers are strong, but they must capture crustals quickly, before their attack platforms break up and their units melt into the lava. You decide the outcome in this fun and exciting game.

Components include:
- *24 page rules booklet
- *12" x 14" map
- *63 unit counters
- *19 "crustal" counters



TWO GAMES IN ONE.....

OneWorld is the game of godly conflict for those who've dreamed secretly of divine power. Each player is a god who must contend with a pretentious challenger. Your "children" wage the struggle in their aspects of Blade, Stone and Fog. Over the Singing Grasses, Runelines, The Faults of Chaos and on the Crystal Pylons the battle rages. OneWorld is a fast playing, humorous game, which features a diceless combat system. This is an excellent game for starters or an amusing diversion for the afficcianado.

ANNIHILATOR is a giant, planet-killing, computer-controlled spaceship. Pan-Human Alliance assault squads and demolition teams blast their way through the ship to get to Annihilator's brain core. The ship has security robots, repairbots, and automatic defenses to stop the humans. Like OneWorld, ANNIHILATOR is a tense and exciting game.

Components include:
- *24 page rules booklet
- *Two game maps
- *129 unit counters

HOT SPOT and ANNIHILATOR/ONEWORLD are available at your local hobby, toy, or book stores--ask for them. Both are $2.95 when ordered from Metagaming. Subscribers to THE SPACE GAMER pay $2.50. Each order requires a 50-cent postage charge.

Metagaming
Box 15346, Austin, TX 78761

STELLAR CONQUEST

Third Time Around

by Howard Thompson

The third printing of STELLAR CONQUEST contains a few minor revisions from the first two editions plus a new rules section. All substantive changes and the new section are covered or fully reproduced here. There is no necessity to buy the new edition if you have this article. The preface explains the reasons.

PREFACE TO THE THIRD PRINTING

STELLAR CONQUEST has become a minor classic since its introduction in 1974. It was among the very first science fiction simulation games. It was the first simulation at the society level. It is one of the few simulation games still widely played four years after introduction. STELLAR CONQUEST has become the standard by which other society level games are measured.

The popularity of STELLAR CONQUEST with gamers is gratifying. It is praticularly gratifying knowing that the Avalon Hill company rejected STELLAR CONQUEST in 1973. STELLAR CONQUEST was the start of Metagaming, then known as Metagaming Concepts. It led to THE SPACE GAMER, our own science fiction & fantasy game magazine. It paved the way for the innovation of Micro-Games. STELLAR CONQUEST proved "amateurs" could compete with the established companies.

In preparing STELLAR CONQUEST for a third printing I've been surprised. The rules and design hold up well compared to current games. The decision not to revise the game seems justified. You don't alter a classic. It stands as a testament and example of its time.

CHANGES by Rules Section

4.2.2 This rule is modified to allow Star Card data to be passed to other players, if desired. It also now states that, "no details about a colony are given at this time."

5.4.1 Added: "Players may route ships around Gas/Dust cloud hexes if it results in a time savings."

6.1 Added: "Optionally, players may mutually decide to resolve combats out of the view of the uninvolved players."

7.2 Clarified so that players understand that a conqueror receives all information about a conquered colony.

7.2.7 Clarified so that players understand the conqueor still controls CTs loaded with conquered population.

7.2.9 Changed so that 10 million or more colonists must be destroyed on a planet to render it uninhabitable.

8.4.6 Deleted so that a CET Colony Transport costs one IU of output, the same as a non-CET CT.

9.2.5.2 In following example it is made clear that IIT is the predecessor development for AIT and RIU.

9.6 The with predecessor development cost of CET is lowered from 30 IU to 25 IU.

11.0 A note is added that invites gamers to create their own negotiation rules if they don't like the "negotiation" rule.

12.0 TOURNAMENT SCENARIOS

Since 1974 STELLAR CONQUEST has become a tournament favorite at gaming and science fiction conventions. The most successful format for tournaments has included a few rules modifications and the use of different starting scenarios. Those familiar with STELLAR CONQUEST will find a new challenge in these variations.

Three Player Scenarios: Often there are not four players available. Three player scenarios use only half the map and provide very competitive play. The density of stars is 50% greater than a four player game and starting positions are closer. The dividing line on the map is between Canopus and Draconis. Canopus and Hydrae are on one half of the map and Mizar, Crucis, Draconis and Zosca are on the other half of the map.

Instead of starting at the entry hexes, players start their fleets directly on a star. In this instance Canopus is treated as a G class star and matched with Canis and Ceti as the three starting positions on one half of the map. Draconis, Bootis and Scorpii are the starting stars on the other half of the map.

Four Player Scenarios: These scenarios also have players starting their fleets intact on a G class star. The different starting positions are as follows:

A. Scorpii, Ceti, Canis, and Bootis
B. Dubhe, Alcor, Diphda, and Tauri
C. Dubhe, Aurigae, Diphda, and Schedar
D. Aurigae, Lyrae, Capella, and Spica

Another effective scenario is the Nova scenario. Each player starts his fleet on Draconis. On turn one Draconis goes Nova and each player must immediately move away. At the end of turn two, any ship on Draconis or a hex adjacent to Draconis is automatically destroyed. The rule for having no ship more than eight hexes away from a base should not go into effect until after turn six is over.

Another variation of the Nova scenario has the Draconis system have an MT 40 NM planet emerge at the start of turn twenty. In this instance ships are destroyed through the end of turn nineteen on or adjacent to Draconis. Ships may move to Draconis on turn twenty and thereafter.

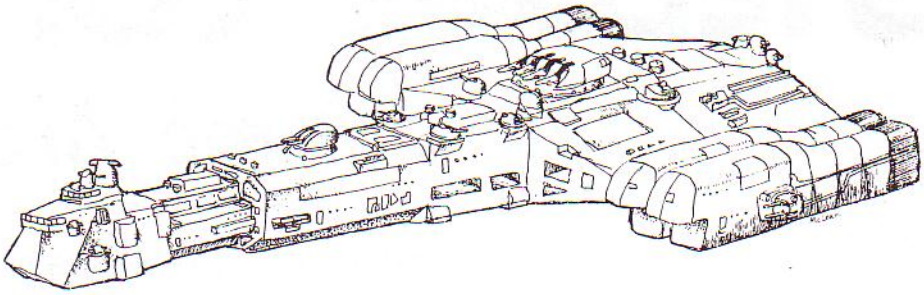
Tournament Considerations: All the scenarios in this section are suitable for competitive play. Varying starting positions give players a new challenge. Starting on a star makes for faster play. Listed below are some other rules that have been used successfully in tournaments.

1. Let each player start the game with a 60 million or 80 million limit TR planet at his starting star. This avoids uneven starts due to players not finding a TR planet early.
2. Let players start the game with a three hex ship movement instead of a two hex ship movement.
3. Have games run for 36 year/turn instead of 40. With fast starting games this saves time and retains play balance.
4. Allow negotiation between between players. This can be limited to situations where both players have ships on the same star hex. Negotiations should be limited to being the first activity in a player's turn.

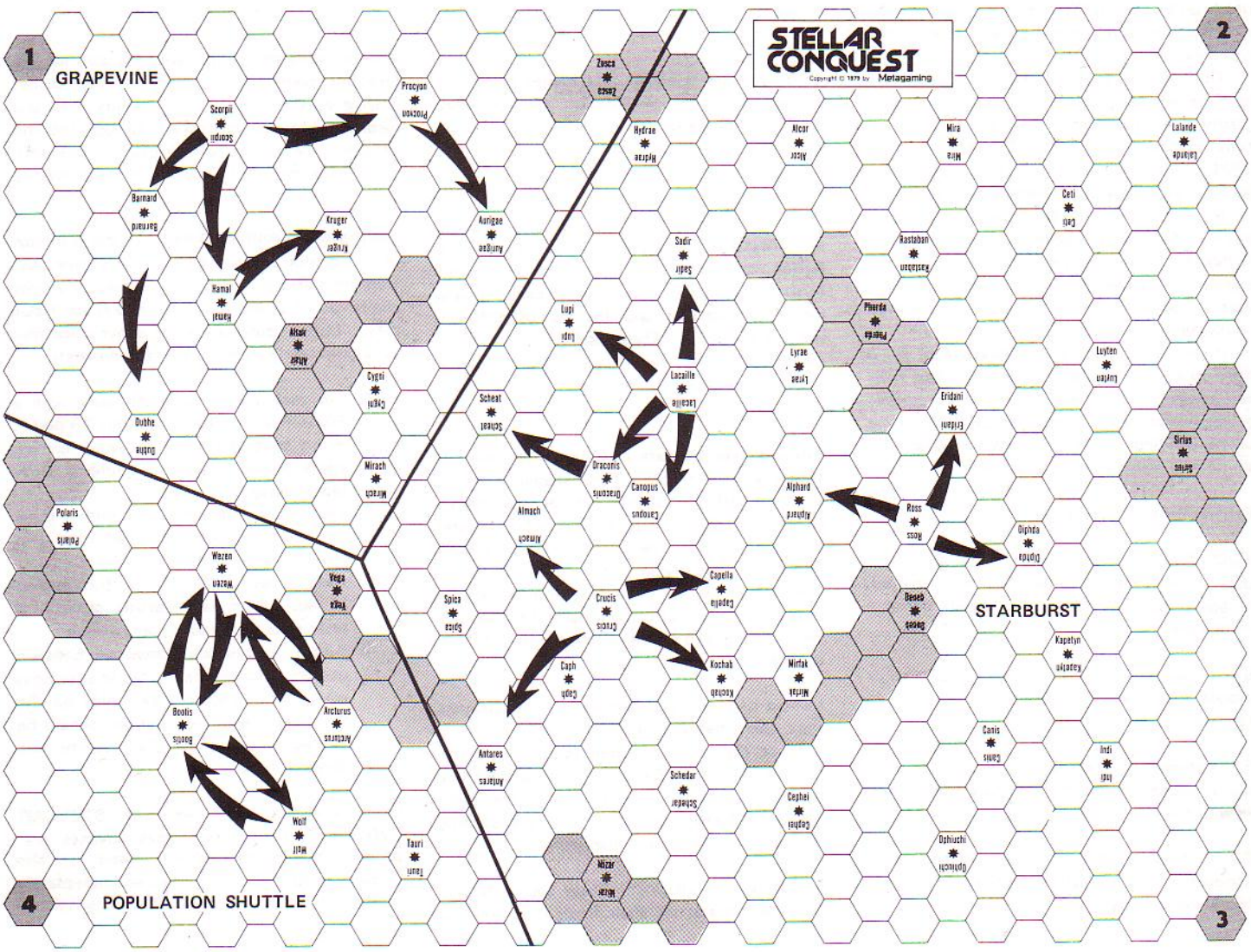
Player Conduct: An enjoyable STELLAR CONQUEST tournament takes advance preparation by the tournament master. It also requires cooperation of players and non-players in their conduct of play. Players should be

allowed room and quiet sufficient for necessary concentration. The following conduct guidelines have been used successfully in tournaments.

1. Players must announce when they have finished their turn and be ready to start their turn when it becomes their turn.
2. Players may take breaks as needed provided they are ready to play when it becomes their turn.
3. Players may agree to take breaks simultaneously after Production Years.
4. Non-players and players may not converse at the play table while play is in progress.
5. Spectators should not be allowed to crowd around tables during play. The play tables may even be roped off or otherwise partially isolated. Spectators should be able to get a view of play.
6. Players should not talk to other players while conducting their moves.
7. A player's score for a game should be entered on his Turn Sheet and be initialed by the other players in the game. Turn Sheets for completed games should be turned into the tournament master after each game.
8. An orientation period should be held for all players before the tournament starts. Players should be allowed to ask questions then and during play when it is not their turn.
9. The tournament master should reserve the right to interpret all rules and stand by his ruling as final. Players who do not conform ot the rules of the tournament should be disqualified from play if deemed necessary. For minor violations it may be sufficient to deduct points from a player's game score.
10. Tournament rounds should always start on time. Those late should be allowed to miss their moves. Those more than an hour late should be disqualified from further play in that game and given a zero score.



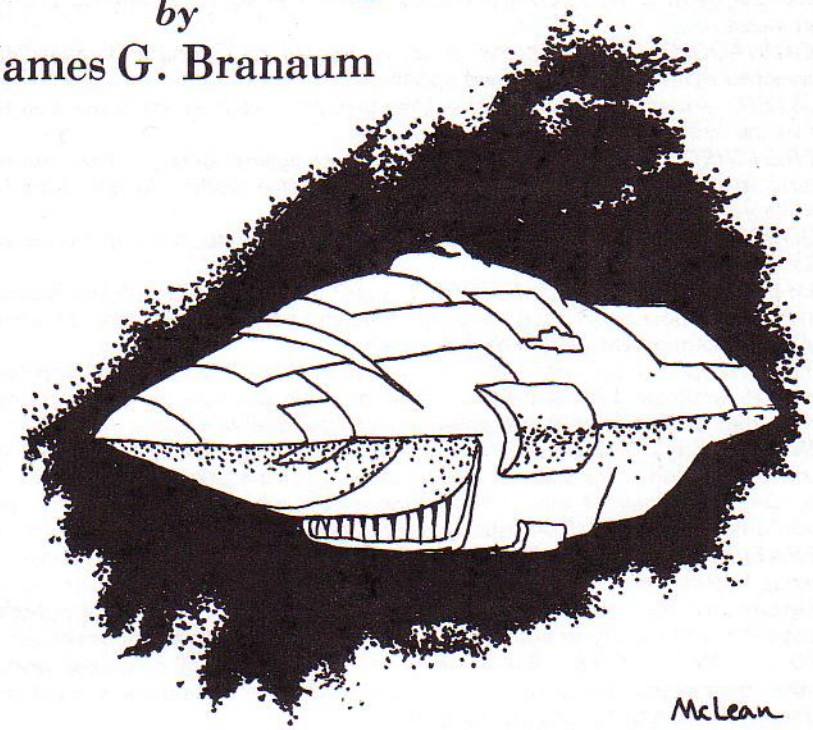
SOME STRATEGIES FOR STELLAR CONQUEST



INIMICAL WAYS TO PLAY STELLAR CONQUEST

by

James G. Branaum



This article is going to look at operational parameters in the basic STELLAR CONQUEST tournament game. These parameters were applied to all games during several tournaments, in one form or another, regardless of rule changes or start-point changes. The basic tournament game rules were published in TSG no. 10 and are detailed in this issue. The major changes in standard rules were as follows:

1) All players started in their corners with Terran 80 Systems, thirty-five million people, four Escorts, and twenty-five Industrial Units to spend.
2) Game procedure was changed to grow population, then build.
3) Planetary Force Screens were priced high enough to be unreachable, but Super Missile Bases were added to counter Dreadnaughts.
4) All Subterran Naturally Metalized Systems were removed from the game.

Also in the same TSG no. 10 article were the operational concepts of "GM-ing" (General Motors-ing), Population Shuffle, Starburst, Grapevine, and Crispy Critter*. It was a very interesting and useful article, however, every one of the aforementioned concepts has its major faults. Specifically, they consistently lose in a game with experienced and competent players.

Under tournament rules, the Population Shuffle is not as good as it looks. The chart no. 1 shows growth rather than shuffle is more productive, and it is substantially more cost effective. With growth, the player has the Industrial Units available at a certain location to build a Dreadnaught; while with Shuffle at the same point in population growth, the total is spread out such that on standard Terran Systems, the player must purchase lesser units.

"GM-ing" requires that other players do not attack the subject prior to the completion of a definite build period. To gamble on that is to flip a one-sided coin.

In reality, the Starburst concept is wonderful without reservation. The only catch to being successful is survival and strength. With that as a controlling factor, this becomes an end-game consideration, rather than a midgame strategy. If the game progresses along fairly standard lines of conflict, Starburst usually does not fit in. It is not needed, useful, or cost effective. Simply eliminating all other competition is more productive, more certain, and generally, quicker.

Initially, Grapevine seems to be a great way to insure a victory, or at least a second place; however, in a reasonably standard game, Grapevining is an invitation to disaster. The potential of an opponent becoming very strong very early in the game is so great that Grapevine just becomes a different way to slow him down, and usually not very well at that. The way to avoid this appears to be larger colonies with Missile Bases, or Advanced Missile Bases. This change significantly lowers the effectiveness of the Grapevine concept, and severely damages the player's ability for on-site production.

The initial Crispy Critter concept is great; however, unmodified, it is an unqualified disaster when used against a competent player. The danger is in the viability of the ranging colony, once the player's Task Force is out of range of the home planet. If the opponent fries the ranging planet population, the Task Force is eliminated, the home planet unprotected, and the opponent has a distinct industrial advantage immediately, without having to take any other action. Nevertheless, there is an important lesson which should be learned, used, and lived with. Speed kills, and this whole concept is based on speed of action. However, there is also the consideration that vacillation is suicide.

Improved versions of Crispy Critter are simple to work out, effective, less risky, and generally, psychologically devastating to the opponent. They shall be dealt with later.

STELLAR CONQUEST is more than just a 'war' game, and it is more than a game in economics. It is actually a study in applied logistics. The pervading concept is to "get there the fastest with the mostest." It has already been demonstrated that the Population Shuffle is not worthwhile in this consideration early in the game, with or without Naturally Metalized Planets. Early development of any Naturally Metalized System is now worthwhile when the gains in population by simple growth are compared to that total Industrial Unit availability at any point in time prior to about the twentieth turn in the game. After the twentieth turn, the Shuffle is much more productive, especially at minimum Terran Naturally Metalized Systems.

To effect the capture of those population centers, one may be interested in using Crispy Critter as a tactic. As shown earlier, that does have definite pitfalls. Avoiding those pitfalls is what some of the improvements do, without excessively increasing the risk of failure, or leaving the player open to other attacks. An interesting improvement is to buy two, rather than three escorts; and nine, rather than one Colony Transport. This enables the player to build the extra Escort which would have been bought, otherwise, at the Advance Base; and protects that base by sheer numberical strength in population. If one Colony Transport is purchased at the Advance Base and sent to a nearby system, it decreases the probability of losing the attacking group because of ranging planet elimination by two different methods. The only problem with this sytem is the possibility of phenomenally poor die rolls. Poor die rolls can totally eliminate the surprise, strength, and viability of the whole tactic. To avoid the effects of those die rolls, the same

(*) These concepts are reviewed in The Summary of this article.

A SUMMARY OF POPULAR STELLAR CONQUEST TOURNAMENT STRATEGIES AND TACTICS

**CRISPY CRITTER:* Initial IU points are spent on Escorts. These, combined with the four original Escorts and one to three Colony Transports in a Task Force, are immediately sent against the nearest opponent, dropping one million colonies along the way in order to lengthen the Escort's range.

DELAYED CRISPER: The warship construction started in *Entrenched Critter* is continued until an attack can be launched en masse.

DREADNAUGHT CRISPER: All effort is devoted to buying a Dreadnaught on Turn 12, and that Dreadnaught is then launched against an Escort-armed opponent.

**DUSTER:* An attack squadron or a Dreadnaught is kept in the home area to intercept Scouts or Escorts before they can visit the inner systems.

ENTRENCHED CRITTER: This popular defense against Crispy Critter consists of buying missile defenses and/or warships early in the game and then staying on your home world. An attacking Crisper must live at the end of his supply line while you stay on your source and outnumber him.

EXODUS: At the start of the game most of the home world population is exported, leaving only enough to build Missile Bases.

**"GM-ing" OR "GENERAL MOTORS":* (used in conjunction with the *Population Shuttle* and a slow *Grapevine.*) As much industry as possible is used to build more industry. Colonies on Minimum Terran Naturally Metalized worlds are the ultimate tournament version of this.

**GRAPEVINE:* In the last half of the game, small colonies (four million for an ST and five million for a TR) are spread over all available TR's and ST's. Most of these colonies cannot be found and conquered before the end of the game. Note that the TR colonies will grow, and can build Missile Bases.

IMPROVED CRISPY CRITTER (ICC): Similar to the original, except that the initial IU points are spent for two Escorts and nine Colony Transports. These, along with the original Escorts in a Task Force, move to a staging world on your border. A colony of nine million cannot be easily destroyed, and can produce front line units while the home world reinforces the colony. This usually is combined with *Scout Diversions, Trip Wire,* Duster, and *String Cutter.*

OPERATION QUICK STRIKE (3-way Critter): The short board opponent is attacked, using ICC. Your own industry sends Escorts to maintain control over your conquests, while industry is used to buy longer range and warships. These capture-produced warships are launched against the short board opponent's long board opponent. Capture of the second opponent will usually provide the industry to defeat the third opponent.

POPULATION SHUTTLE: Every fourth year, two TR or ST colonized worlds within eight hexes of one another ship each other their population growth plus enough of their own population to get an optimum emigration bonus. This is a straight trade of IU output for population gain.

SCOUT DIVERSIONS: Scouts with an occasional warship are launched against opponents in order to keep them off-balance while other Scouts fake colonization and shuttle missions.

**STARBURST (A variant of Grapevine):* Multiple Escorts are built at dispersed points and hidden in Task Forces up to the 36th turn in the game. On Turn 37, the Task Forces are broken down into individual Escorts which are spread over all available ST's and TR's. While these are more visible than *"Grapevine"* colonies, Escorts can fight back and can capture unguarded colonies.

STRING CUTTER: A warship, often posing as a Scout, sits in a *Trip Wire* position until an enemy attack starts. The cutter then moves against the staging world of the enemy attack.

**TRIP WIRE:* Border defending warships are parked over an unusable system as if it is a colony. Attacking warships will strike there first, allowing real colonies time to react.

**Excerpted from Shayne Gad's excellent article in THE SPACE GAMER, No. 10.*

CHART NO. 1

SINGLE WORLD GROWTH VS. THE POPULATION SHUTTLE	TURN 0	4	8	12	16	TOTAL IU OUTPUT
GROWTH (1 TR 80):						
Population	35	35	42	50	60	
Growth	----	7	8	10	12	
Total IU Output Per Turn	*25*	*42*	*50*	*60*	*72*	*249*
SHUTTLE (1 TR 80, and assuming immediate discovery of another TR 80):						
Home World Population	25	25	28	36	42	
Growth and Imports	----	5	5	7	8	
Exports	10	6	6	9	9	
(Plus In-transit Growth)	---	(2)	(2)	(3)	(3)	
Home World Total IU Output	*15*	*24*	*26*	*34*	*41*	
World No. 2 Population	0	10	15	20	30	
Growth and Imports	----	2	3	4	6	
Exports	----	3	6	6	9	
(Plus In-transit Growth)	---	1	2	2	3	
World No. 2 Total IU Output	*0*	*7*	*12*	*18*	*27*	
Total IU Output Per Turn	*15*	*31*	*38*	*52*	*68*	*204*

CHART No. 2

SINGLE WORLD GROWTH VS. COLONIZATION OF A BARREN NATURALLY METALIZED WORLD

	TURN					TOTAL IU
	0	4	8	12	16	OUTPUT
GROWTH: See Single World Growth Plan in Chart No. 1 BRNM (1 TR 80, and assuming immediate discovery of a 20 million BRNM and Initial Purchase of Controlled Environmental Technology						249
Home World Population	35	35	35	35	40	
Growth	---	7	7	7	8	
Exports	---	7	7	2	0	
(Plus In-transit Growth)	---	(2)	(2)	---	---	
CET Costs	25	14	9	4	0	
Home World Total IU Output	*0*	*21*	*26*	*36*	*48*	
BRNM 20 Million Population	0	0	0	9	18	
Imports	---	---	9	9	2	
Total Population	---	---	9	18	20	
BRNM Total IU Output	*0*	*21*	*44*	*72*	*88*	*225*

CHART No. 3

CAPTURE OF SHORT BOARD OPPONENT VS. COLONIZATION OF TWO 40 MILLION MINIMUM TERRAN NATURALLY METALIZED WORLDS

	TURN					TOTAL IU
	8	12	16	20	24	OUTPUT
CAPTURE:						
Player No. 1 Total Population/IU (under Growth Plan, assuming colonization of TR 60 on Turn 22)	50	60	72	80	86	
Player No. 4 Usable Population/IU captured by Player No. 1 on Turn 7	0	50	50	50	50	
Total IU Output Per Turn	*50*	*110*	*122*	*130*	*136*	*548*
MINM:						
Player No. 2, assuming growth until dual colonization on Turn 9						
Home World Population	30	30	33	30	30	
Growth	---	6	6	6	6	
Exports	---	3	9	6	6	
(Plus In-transit Growth)	---	(1)	(3)	(2)	(2)	
Home Total IU Output	*30*	*33*	*30*	*30*	*30*	
MTNM-40 No. 1 Population	0	10	14	14	22	
IU Output	*0*	*20*	*28*	*28*	*44*	
MTNM 40 No. 2 Population	0	10	10	22	22	
IU Output	*0*	*20*	*20*	*44*	*44*	
Total IU Output Per Turn	*30*	*73*	*78*	*102*	*118*	*401*

type of tactic is used with Dreadnaughts rather than Escorts. The hitch here is that the player must stall his opponent into not taking the offensive, and not thinking defensively enough to build Dreadnaughts. One interesting way of doing this is to purchase a few extra Scouts, and send them to the opponent's home planet. To really confuse the issue, send an Escort after two or three Scouts. Timed properly, this should completely unsettle the opponent. This system works even better if followed with a couple of more Scouts, and then a pair of Escorts, timed to hit his home planet just after he should have launched a massive Escort fleet to stop you from building Dreadnaughts. This system gives you a wealth of data on his activity during the interim, and either slows or stops his attempted assaults in your direction.

In the event you capture a population group you cannot hold or do not want to because of its small size, burn as much of the group as possible. This will further unsettle the opponent, and, if you are lucky, it will enrage him to the point of gross carelessness. In addition to these benefits, there is further gain, and that is the extensive damage you have done to the opponent's production, growth, and general battle plans. If, however, the player using this tactic can hold the center involved, and it is of substantial size, it makes a great addition to his industrial production.

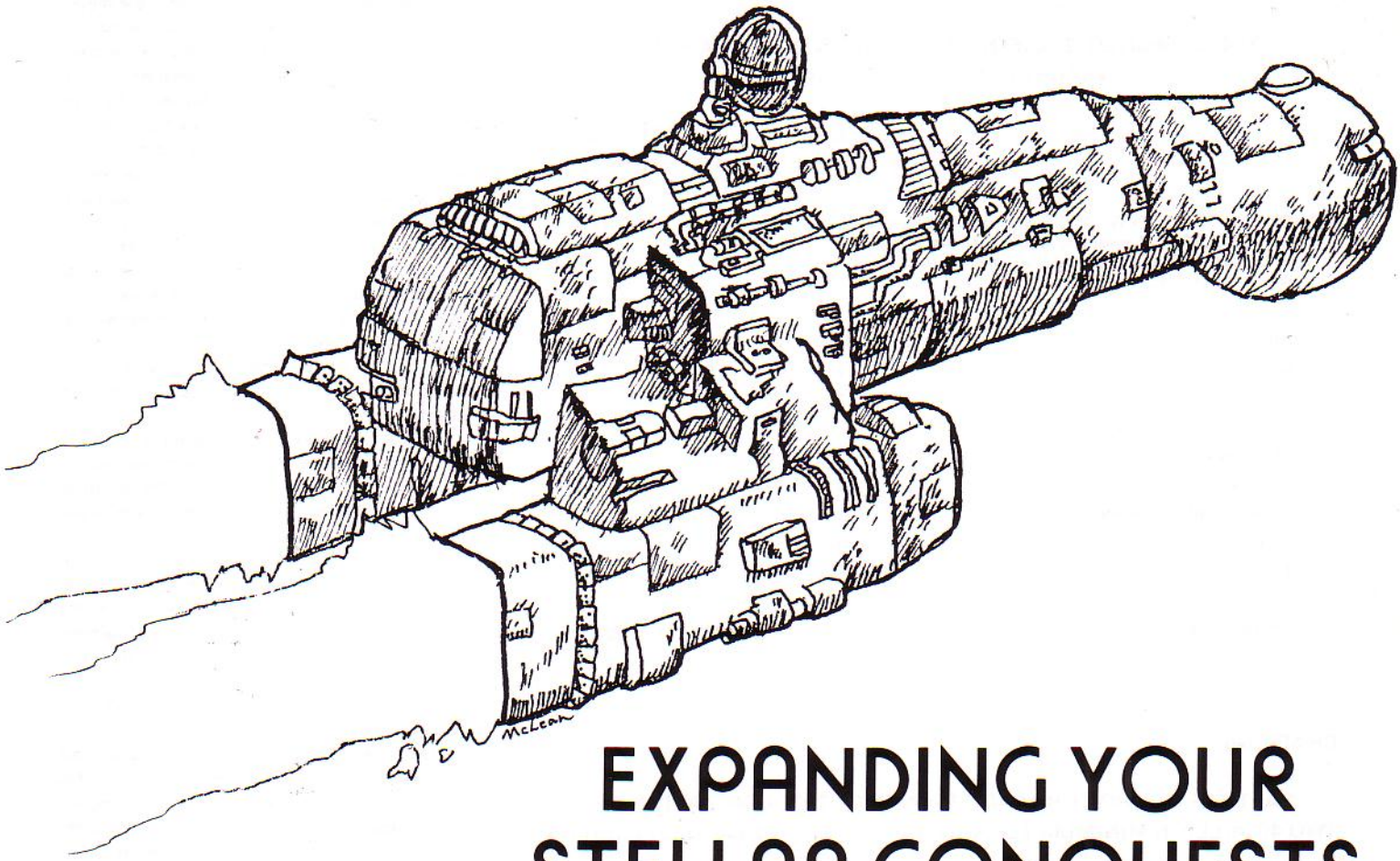
Up to this point, the short board opponent has been the intended victim. Assuming that the player has been successful in capturing the major population centers of his short board opponent, he should initiate Operation Quick Strike. Operation Quick Strike is an immediate 90 degree turn to the captured short board player's long board opponent, and attack on that opponent with all available warships. This makes for a very short game as the fourth player will usually capitulate. If not, another 90 degree turn and Operation Quick Strike is in order. Failure to do so may give the fourth player enough time to "GM" you to death.

It should be noted that these tactics must be changed to fit the player, the player's situation, and the specific rules used. The strategic considerations generally remain constant unless major revisions are made in the rules of play. Other than attempting to remain totally unpredictable, these are the major operational parameters that generally increase a player's probability of a win.

Jim Branaum
Research and Development Department

Charts and editing by the BLOODTHIRSTY UNDESIRABLE GAMING SOCIETY (B.U.G.S.) General Staff:

Doug Anderson (Stellar Conquistador)
Bob Blair (The Blob)
Bruce Mickelson (The Armchair Admiral)
Dr. Bob Polzin (Dr. Bob)
Corwyn Prater (Corwyn of Amber)
David Ray (Heavy Weapons)



EXPANDING YOUR STELLAR CONQUESTS

BY

Frank B. Weir, Jr.

My forte in wargaming has been the ability to conduct an offensive with one hand tied behind my back, supposedly leaving me out numbered and on defense.

First, I believe firmly in the old adage of a good offense being the best defense, especially when the steps you take to gain offensive power can provide a good defense, as often happens in STELLAR CONQUEST (SC).

Although running a war cheaply is seldom a factor in real life, it is very important in STELLAR CONQUEST. You must use the smallest fleet and least defenses, but still win the battles you have to win. After all, SC is a game of economics. The main goal of war is simple Industrial Unit (IU) attrition.

The cheapest way of gaining IUs is colonization. Colonization leads to a wide spread of colony planets. Building missile bases on all these colonies is expensive, duplicative, and wasteful. The best defense is a central fleet. The best way for this fleet to work is in quick counter-offensives, knocking out enemy ship base before the ships arrive at a planet which leaves them more than eight hexes away from a base, thus eliminating them.

These three concepts, colonization, central fleet, and counter-attack, are greatly enhanced by superior movement capacity. Your Colony Transports (CTs) don't waste production years in transit, your central fleet can arrive before the enemy, and a faster fleet has an easier time ripping off enemy bases.

There is no good reason to move slowly in STELLAR CONQUEST. Ship movement is cheap and adventageous. You can start the game at 3 MA (Ship Movement). From there I follow a Technological Development schedule something like this: Improved Industrial Technology (IIT) (followed by industrialization). Attack Ships (ATK), Dreadnaughts (DN) (big push for latter about the time IIT is topping out), then 5 MA (ship movement allowance), Unlimited Ship Range (USR), with Robotic Industrial Units (RIU) following as quickly as possible. Main emphasis then switches to industry, though leftovers may go for Improved Ship Weapons (ISW) and 8 MA (ship movement allowance). The end of the game sees unrestricted ship building.

The big controversy among players here is the decision to go ATK instead of Missile Base (MB). First, ATK-DN is 5 IU cheaper than MB-DN in Technological Development Cost. You do have to achieve level one technology, but no one says you have to build the junk. Of course, this is not to say I don't build ATKs.

What's so hot about missile bases? Two for the price of one ship? Hardly. Your first six MBs cost 49 IU, your first six Escorts (ESC) cost 48. Unless you are playing some sort of hawk, 10 ESC ought to be able to handle all your defense and offense until Dreadnaughts (DNs) are built. Six MBs and 4 ESC are barely enough to provide a weak defense, with no offense. Sure, you could build more MBs, but the idea is to have a cheap fleet.

Why build Attacks (ATK)? They cost as much as 2.5 ESC, but are worth only 2.4. It takes three to match a DN, but you only get two for the price. I won't count research because DNs are necessary, and ATK technology is a necessary evil of DNs. I will note here, however, that the ATK does rule supreme for a large portion of the game, before the DNs horn in.

Well, until DNs are built, you use ATKs to attack. If you don't like the odds, attack somewhere else. Now, an ATK is worth exactly 2.4 ESC only when it meets exactly 2.4 ESC and fights to the death, in other words, rarely. How many times do you see a single ESC running around? Quite often. Encountered singly, an ATK can take out four ESC before it finally goes down. If it takes on two pair, one after the other, it can kill three ESC. Double up your ATKs and things really begin

to look good. They can take out 12 ESC one at a time before both are destroyed by return fire, or 3½ pair, or two three-packs, or tackle four with only a single casuality. All these are favorable attrition. The ATK is concentrated power that stays that way, often gaining the upper-hand in battle.

Of course, the best way to get favorable attrition is to take or destroy something while losing nothing, like shooting MBs (ESCs won't stand still) with DNs; or shooting population with ATKs (IU for IU, they do this the best).

You can't get IU-greedy. You could buy a constant output of two IU per production year for the expenditure of 1 ESC, which is the minimum needed to control a conquered colony. It's worth that. Trouble is, the other player might want his colony back. One thing a small fleet cannot support is full fledged war. What's really wasteful is losing ships shooting up other ships and defenses, and then not having anything to show for it because your opponent recaptured the planet. Burning population is a good way to damage your opponent's industry, and we're talking IUs per production year, not just IUs. This tactic verges on the dastardly when you're dealing with IIT, Advanced Industrial Technology (AIT) or a Natural Metallized (NM) planet.

Since I use USR as a stepping stone to RIU, many crippling attacks can be made deep in the enemy's rear areas. Although my fleet is usually smaller than the defending fleet, it is also usually faster. It can out maneuver a larger fleet and pounce on a couple of ships or a totally undefended planet and go to work. Of course, I usually get interrupted by defenders, which is when I take off and nail another planet.

If you don't have USR or forward colonies, you can still attack the enemy's rear using a bridge. A bridge is 1 million people put on a planet for the sole purpose of extending ship range. The quickest bridges are pretty obvious, from yellow star to yellow star: Scorpii-Dubhe-Bootis-Tauri-Schedar-Canis-Diphda-Deti-Alcor-Aurigae-Scorpii. A bridge is easy to cut, if you know where it is, but if the attackers grab a colony, they have a ship base right there.

To prevent a raiding bridge you can create a moat. With a single ESC and a fleet of CTs go about building all possible bridge links from their worlds to yours, and then fry the 1 million people with the ESC, leaving an uninhabitable void too wide for ships to cross while maintaining normal ship range. (New SC rules make this a more expensive strategy. Ed.) Another use of this is to set it up on the long side of the board in a four player game. Use distance and gas clouds as protection from the player sitting opposite corner from you and then mount a full scale attack against the player across the short side of the board. Such a maneuver may well give you a large colony base early in the game, though you'll have to maintain a military stance for the remainder of the game to protect it.

One other thing you can do with unwanted civilians is to put their CTs in with the rest of your fleet. While the enemy is shooting them up, you can be blasting away at their warships, and he'll be calling you an idiot for exposing your transports to fire.

The theory of this strategy is that you can concentrate on early industrialization using mobility to prevent hawks from crushing you in the first few turns. In addition, other industrialists will have to distract some from their industry for defense as your constant probes threaten a serious attack. In short, keep the enemy off-balance while preventing him from upsetting your game plan. Once you start playing your own game, a victory should come easily.

Minimally Habitable Cluster: A Variant

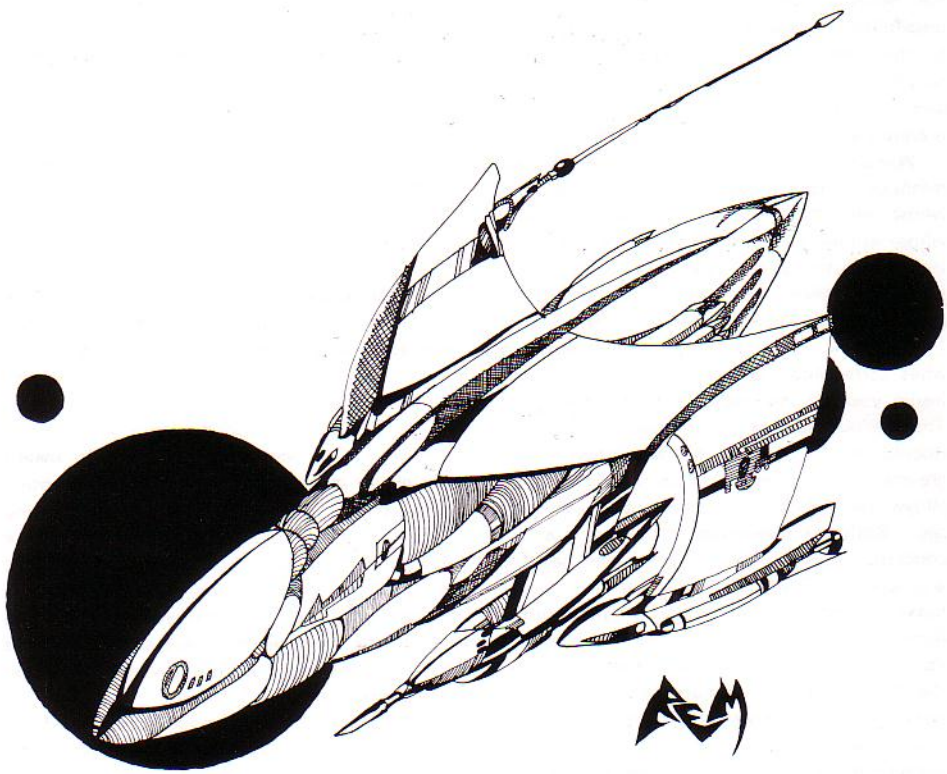
This variant was designed to promote early war, lower levels of industrializaion, and take the emphasis off of NM habitables. It is also compatible with the tactical level above.

The first TR-40, TR-60, or TR-80 a player finds becomes his home base, and is treated normally. Each player is allowed one, and only one, home base, though he must discover this planet normally. If he has trouble, he may elect to take another planet for his home base, though he still only gets one and may not switch (ST-60's, MT-40 NMs, and the ST-40 NM make good alternates).

All other planets have one change made in their star card listing; their maximum habitation limits are reduced to 25% of the original, rounded down. A TR-80 becomes a TR-20, an MT-10 becomes an MT-2, a BR-20 NM becomes a BR-5 NM, etc.

The maximum defenses a planet may use are set at one AMB and four MB per one million *inhabitants.* PFS's may be used in addition to this on any planet.

This type of game is usually played to the death, but can be played to a time limit (I suggest 60 turns, due to the slower evolution of industry). Figure the winner normally, except that home planets count triple what they normally would.



ORDER out of CHAOS
Benefit Cost Analysis in Wargaming

by

Glenn L. Williams

War has always been chaotic. It has always been risky. But the chaos of modern war threatens national survival. The complexity and consequences of military decisions have caused military leadership to evolve into military managership. By analysis and planning, through compromise if need be, military managers now seek to bring order out of chaos and reduce the risks of their decisions. With the additional challenge of limited budgets, military managers have to make sure they get the "best bang for the buck". One tool to help them face these challenges is benefit-cost analysis. When faced with alternative weapons systems, the planner compares ratios between the benefits and the costs for each of the possibilities, looking for the most cost-effective. In the 1960s, the controversial TFX fighter project (today the Air Force's F-111), was a pioneer example of this technique. Today it is common.

Wargames can be used to illustrate the basic methods of benefit cost analysis. Even generals whose only theater of war is a paper map and whose armies are cardboard cutouts can use it to examine the games they play. In this article I intend to show how this can be done using recent, inexpensive wargames as examples.

The basic idea is to create a ratio between what something does and what it costs, to insure you get the biggest bang for the buck. The various factors which need to be considered in that decision are quantified to the greatest extent possible. Quantifying variables allows the analyst to compare apples and oranges. Both are converted to a more abstract concept, "fruit": the ratio between benefits and costs. Eventually, the decision maker looks at mathematical models of the alternatives. Critics of the technique argue that the ratio can be too simple, that it muddles the fine details and ignores those which do not reduce to numbers. The result, they say, obliterates important distinctions between competing alternatives and substitutes an imperfect method for experience.

A simplified version of the process consists of several steps:

1. *Define the objectives precisely.* The definitions should be complete enough that the analysis flows directly from them.

2. *List each alternative* that will accomplish the objectives.

3. For each alternative, *list the benefits* it will provide. As much as possible, these benefits should be expressed in numerical form to help the analyst. Sometimes, measuring the benefits is more complex than estimating kiloton yields of various ICBM warheads. For example, how can an analyst even begin to quantify the benefit derived when a nuclear aircraft carrier "shows the flag" in a foreign port? What is the psychological benefit of a Minuteman III missile in a newly hardened silo? Sometimes, the numbers hide the fact that two different things are being measured along two different scales which do not directly correlate to each other.

4. *Discover all the relevant costs* for each alternative. These include not only production and purchase costs, but repair and upkeep over the life of the system. There are also "opportunity costs"; in buying one thing, the purchaser has lost an opportunity to buy something else. Money spent on an MX missile system, for example, is not available if there is a sudden need to fund fusion power research. Some costs, as some benefits, cannot be reduced to numbers. An example is the "spill over" effect, a term used for side effects not directly related to the problem at hand. American politicians who make military contract decisions with an eye toward future elections are considering this effect. We may not agree with such costs, or the weight given them, but they are real costs within the context of the decision process.

5. *Examine the constraints* or limits on the decision. In wargaming terms, this means the player must carefully read the rules, noting such things as terrain effects and stacking limits. In a strategic nuclear context, one constraint is the American policy decisions should not appear to be aggressive. That constraint limits some alternative deployments for ICBMs, and recently was an issue in the SALT negotiations as the Soviets questioned our Shuttle program.

6. *Devise a mathematical model* of the benefits and costs which yields a simple ratio for each of the alternatives. The model-making process actually begins with step 1, and is refined at this step. One important feature of the model is explicit. The quality of an analysis depends directly upon the assumptions that underlie it -- that were used to simplify the mass of data, parameters, etc. the analyst had to distill. Too often, the assumptions found on page one are the facts of page three, and the "too difficult to analyze" becomes "trivial" a few pages later.

7. *Select the alternative* with the highest ratio of benefits to costs. Having made that choice, the analyst often looks over the ranking to see if it also makes intuitive sense. A very precise analysis can lead to a very precise wrong answer.

8. *Test the selection.* A technique frequently used is "sensitivity analysis". The assumptions are changed to see how sensitive the outcome is to those changes.

As a beginning exercise, consider a relatively simple game, SPI's "space capsule" THE CREATURE THAT ATE SHEBOYGAN. In this game, a creature of unknown characteristics is stomping around the downtown area of Sheboygan, Wisconsin, razing buildings and scaring the populace. The opposing player represents the municipal government attempting to bring the creature under control with national guard infantry, artillery and tanks, plus the police with their cruisers and helicopters. The objective for the human player is straight forward: kill the creature before it destroys a specified number of buildings and people. The human player knows only that the creature has a fixed number of points to allocate among: 1) movement; 2) attack; 3) defense; 4) building destruction; and 5) special abilities such as fire breathing, flying, net weaving or great height. The actual allocation is discovered the hard way, in battle when the creature uses the ability.

Human units have three characteristics: 1) combat strength; 2) range of weapons; and 3) movement allowance. The human player, like the creature, is given a set number of points with which to purchase a suitable force to oppose the monster. The cost of each unit is its combat strength. A police cruiser with a combat strength of one costs one, a national guard tank with a combat strength of six costs six. Table One lists the human units and their characteristics. Since human units also have special abilities, these need to be mentioned: Police can move populace counters at a higher than normal movement rate. Helicopters pay no terrain costs. National guard infantry may make suicide close assaults at double strength.

In game terms, the creature's defense strength must be reduced to zero. There is no Fabian strategy of retreat in this game, only combat will achieve the objectives. The beast enters from a pre-selected map edge which is not known to the human when he deploys. The assumptions of our model are that combat

strength and mobility are equally important, since the human units do not know from where the attack will come. A second assumption is that special abilities are of minor importance (a simplifying but dangerous assumption). A third assumption, which will be changed later, is that range initially has no value.

The creature's objective is to amass victory points. It receives 3 points for each low building, 5 for each high building, 5 for each populace, and one for each human combat strength point it destroys.

Now let us insert what we know into the benefit cost analysis process:

1. The objective is to kill a creature which can enter from any direction.

2. The alternatives are the various types of units which may be purchased.

3. Benefits are the unit characteristics printed on the counters and listed in Table One. Special abilities are ignored for the present.

4. Cost is equal to the unit combat strength.

5. The constraints (other than the rules themselves) are the limit to the number of combat points available for purchase.

6. The mathematical model for these units is shown in formula no. 1.

7. Table one shows the computed ratios for this simple model. The higher the ratio, the more cost-effective the unit is.

8. Following this analysis, the player would first buy police helicopters, then police cars, then national guard infantry, followed by tanks and finally, artillery. However, there are two obvious flaws in this analysis. First, the effects of range were assumed away. In the game's combat system, a unit attacking with ranged combat ignores adverse combat results. In addition, range can offset some of the creature's mobility. Second, an important constraint of the game rules is the stacking limit of two units per block. A force composed entirely of police cars could never bring enough force to bear to destroy the creature before it did its damage.

To illustrate how altering the assumptions or the model changes the analysis, consider one change: combat ability can be expressed as the product of combat strength and range. That change alters the cost benefit ratios. The new formula is shown in formula no. 2. Table One shows these new ratios in parentheses next to the old ratios. The analysis now reflects the adage that discretion is the better part of valor: with mobility and the ability to strike from outside the creature's grasp, units are more powerful and a little safer. Because of their movement and low combat strength, helicopters are still a very good buy. This type of change to test the model is called "sensitivity analysis", and this model was obviously very sensitive to changes. This is shown very well in the dramatic change in value for the national guard artillery unit. Assumptions, thus, are crucial. That is why they must be made explicit. The analysis could be extended by taking into account special abilities, terrain effects on movement and combat, and line of sight, which reduces the value of ranged combat by limiting it.

Most games are not as simple as CREATURE, and even that game is not as simple as the preceding illustration. Special abilities can be extremely hard to quantify, yet have a major impact on the relative values of units. Very often such unique effects are found in the terrain rules, particularly noticeable in games which impose varying costs for infantry and armor to enter the same terrain. Sometimes the effects are extraordinarily complex, such as the ability of Warp Line Generators in HOLY WAR to create new paths of rapid movement for other units in the game. One game where these effects are treated very well is ICE WAR, with its terrain conversion feature.

Recently, an issue of TSG carried an article using elementary benefit cost analysis in examining alternative tactics and relative unit values in ICE WAR. One feature of the game noted in the article but not directly incorporated into the author's model, was terrain conversion. ICE WAR simulates a raid on the Alaskan oilfields near Deadhorse from across the polar ice. Units are sleds (big snowmobiles), hovercraft, and more conventional infantry, tanks, and VERTOL transports. The game also incorporates orbiting surveillance and weapons systems. Since the game assumes widespread use of tactical nuclear weapons in a frozen environment, floes of ice and tundra may melt, changing their terrain character. This feature is terrain conversion. Ice becomes open water, tundra becomes mud.

The victory conditions for the invading ESA player depend solely on the number of oilwells he can destroy. For the defending American player, the objective is to limit the damage. Oilwells are destroyed by converting the terrain of their hex. There are no victory points for destroying enemy units, nor is there a time limit which either player must race against.

Terrain conversion is a side effect of combat, and has three uses in the game: 1) it is the only means by which the oilwells can be destroyed; 2) unfavorable attacks can be converted to favorable attacks if the defending unit is especially sensitive to such changes (such as infantry caught on melting ice); and 3) conversion can limit the mobility of an enemy force and channel its attacks, particularly when the force is sled-heavy.

There are four attributes to measure for each ICE WAR unit: 1) combat strength; 2) movement allowance; 3) the ability to convert terrain; and 4) the effect conversion has on the unit's ability to move and fight. I call this last attribute "versatility."

The objectives of the game require terrain conversion be a feature of the model we build. Assumptions relating the benefits and costs also need to be specified. The first assumption is that each attribute is of equal importance. This assumption is necessary because the player assembles his force with only a slight knowledge of the nature of his opposition. In the face of uncertainty, each factor is assumed to have equal weight until proven otherwise by experience. Second, while combat strength, mobility and the ability to convert terrain are directly measurable (from the counter itself or by inspection of the terrain conversion table), versatility is a modifier of the other three. The simplest way to modify them

FORMULA ONE

$$\text{Benefit Cost Ratio} = \frac{\text{Combat Strength} + \text{Movement Allowance}}{\text{Combat Strength}}$$

FORMULA TWO

$$\text{Cost Effectiveness} - \frac{(\text{Combat Strength} \times \text{Range}) + \text{Movement Allowance}}{\text{Combat Strength}}$$

TABLE ONE THE CREATURE THAT ATE SHEBOYGAN

Unit Type	Combat Strength	Range	Movement Allowance	Cost Effectiveness
Helicopter	1	2	7	8.0 (9.0)
Police Car	1	1	3	4.0 (4.0)
Nat'l Guard Inf	3	1	3	2.0 (2.0)
Nat'l Guard Tanks	6	2	5	1.8 (2.8)
Nat'l Guard Arty	5	6	2	1.4 (6.4)

FORMULA THREE

$$\text{Cost Effectiveness} = \frac{\text{Versatility} \times (\text{Combat Strength} + \text{Movement} + \text{Conversion})}{\text{Unit Cost}}$$

TABLE TWO ICE WAR: UNIT VERSATILITY

Unit Type	Effect of Conversion	Area of Map Before Conversion	Area of Map After Conversion	Versatility (average of last two)
Hovercraft	No effect	1.0	1.0	1.0
Sleds	May not enter water, are "stuck" in mud-- may then only attack the surrounding six hexes	1.0	less than .01	0.5
Tanks	Conversion has no effect -- before and after may only enter tundra and mud	0.2	0.2	0.2
Infantry	Before conversion may enter any hex on the map, after only mud	1.0	0.2	0.6

FORMULA FOUR

$$\text{Team C/E} = \left[\frac{\text{Min Vers} \times (\text{Sum of Combat} + \text{Trans. Mvmt} + \text{Team Conv})}{\text{Team Cost}}\right] + \text{Transport C/E}$$

TABLE THREE ICE WAR: COST EFFECTIVENESS RATIOS FOR ESA UNITS

Unit Type	Vers.	Combat	Mvmt.	Conv.	Cost	C/E	Rank
Hover Transport	1.0	1.0	4.0	1.0	1.0	6.0	1
Light Hover	1.0	2.0	6.0	1.0	2.0	4.5	2
Armored Hover	1.0	3.0	4.0	2.0	2.0	4.5	2
Infantry	0.6	4.0	1.0	2.0	1.0	4.2	3
Sled Trans	0.5	2.0	4.0	1.0	1.0	3.5	4
Armored Sled	0.5	5.0	4.0	3.0	2.0	3.0	5
Tank	0.2	6.0	3.0	4.0	2.0	1.3	6

is to find some multiplier that shows the general nature of the effect.

The effect of terrain conversion varies with each type of unit. Sleds may not enter a converted terrain hex, while hovercraft ignore conversion completely. Tanks may not enter ice or water, but may move through tundra or mud. Infantry can enter ice, tundra or mud, but not water. One way to measure this effect is to count the hexes a unit may enter before any hex on the map is converted, then express that as a percentage of the total map area. Next, count the number of hexes the unit could enter or attack if every hex on the map were converted, then express that as a percentage of the total map area. The versatility is found by averaging those two percentages. Table Two shows the versatility for each type of unit. Since VERTOLS are not combat units, they are not being considered, but the technique is the same.

Terrain conversion as an attribute is not readily measurable from the unit counter. To arrive at a point value for it, consider the highest number on a die roll that would result in conversion if the unit were to attack by itself. For example, a tank with a combat strength of six converts terrain on a roll of one through four, so its terrain conversion value is four.

Cost in ICE WAR, unlike in CREATURE, is not an expression of combat strength, but an abstract measure of relative worth (see the Designer's Introduction in TSG 18). It is functionally an economic factor since it is used to allocate a limited resource -- the fixed number of points with which a player may build his army.

All of the features needed to build a mathematical model of ICE WAR ground combat units are now present. Missile sleds and missiles are beyond the scope of this analysis, but the reader may wish to attempt to add them to this model. The model quantifies the unusual terrain effects plus the other more conventional characteristics. It is more complex than that of Tony Watson's analysis in TSG 22, but complexity comes with a price: the extra effort may not yield appreciably superior results. See formula no. 3.

Table Three gives the resulting ratios as well as the unit values used to compute them. In addition, units are ranked in descending order of cost-effectiveness.

There are two observations that can be made about the results in Table 3. First, for the invader, tanks and infantry are useless without transports. Tanks cannot cross the ice, while infantry do so too slowly. Since they require a transport, a team approach might be more useful. Perhaps we should change the assumptions and try to derive team cost effectiveness ratios. That would expand the definition of a weapons system from a single combat unit to a package of units which are used together.

Second, a seemingly weak unit, the hovercraft transport, has emerged as the single most cost effective unit in the game. Is it really a good buy? Sensitivity analysis could help examine its relative worth. Since time and stacking are not constraints in the game, mobility and versatility might not have the same weight as combat and conversion capability. However, the hover is cheap. It can go anywhere, and even a weak unit has a chance for conversion. When combined with an effective passenger that could help support breakthroughs and also destroy oilwells, the high value of the hover might make more sense. Once again, a team approach might be more useful.

The team approach is more complicated than simply adding two cost effectiveness ratios together. The relationship between two parts of a whole is not usually their sum. Because the game rules have constraints which prohibit combat by a passenger on the turn it dismounts, a transport might have to initiate a breakthrough or defend by itself. Otherwise, combat strength is additive. The terrain conversion feature is nearly additive, as inspection of the chart will show.

Movement also is not quite so simple as addition. A passenger unit may not move the turn it dismounts, so mobility is more a function of the transport's movement allowance than the passenger's. Versatility itself is no greater than the weakest link in the team. All units should be able to join in battle, a consequence of the team assumption. The final ratio will be the average of team effectiveness and that of the transport alone (because of the turns it might have to move and fight unsupported by its passenger). Given these assumptions, the model is shown in formula no. 4.

Table Four shows the results of this approach. Once again the teams are ranked according to cost effectiveness. There are four teams shown, the combinations possible with two types of transports (sled and hover) and two of passengers (tanks and infantry). If the reader analyzed VERTOLS, he might wish to attempt a similar team computation for comparison.

The low versatility of tanks and sleds contributes to their relatively low overall effectiveness. Assuming hovers and infantry are teamed, they are a very good buy in this model. This entire analysis changes, however, if doctrinal assumptions are changed. For example, a USA player who conducts a close in defense may not be concerned about the low versatility of tanks because he intends to fight in and around the islands.

Sometimes, there are considerations that go beyond numerical measures and are fundamental to the game. In HOLY WAR, Metagaming's new MicroGame, one player is attempting to hurl a star into a sensor duct of the quasi-mechanical god Amtik, within whose vast body the war occurs. These Sunthrowers are opposed by the Holy Band, a group of believers to whom such an action would be sacrilege. The game's victory conditions require the Sunthrower player purchase a special type of space ship, the pressorship, whose function is to move a star to a sensor duct, then hurl it into the duct. The Holy Band, similarly, has a special ship, a StarBuster, whose function is to blow up the Sunthrowers' purloined star, but if they blow up the star, they have to explain it to their god. The explanation requires a ship called an Emissary of Prayer, which must be in one of the sensor ducts to get the god's attention and convey their explanation and apology. None of these ships types have really good cost effectiveness ratios without considering these special abilities. In purely economic terms, they are poor buys. However, the player who does not purchase these ship types, "buys" a defeat.

In HOLY WAR, buying these needed ships has an "opportunity cost": the activation points that went to the necessary ships are not available to buy combat ships, and combat in the key to victory. In general, if the player makes a mistake at this point (when he is assembling his forces), it's a case of "buy now, 'pay' later." No matter what the game, the same principle applies. This is why some simple form of cost benefit analysis can help a wargamer.

The preceding discussion has highlighted a real world technique which military planners use when deciding what to buy, how much, and where to deploy the forces. There are other aspects too complex to cover here. For example, in life cycle costing, the analyst must also consider not only research, development and procurement costs, but also maintenance, supply, support facilities, and salaries for as long as the weapon system lasts. Even the costs and benefits of salvage or transfer to a thrid world nation must be considered. A game which would lend itself to that type of analysis would be SPI's recent game of the Spanish Armada (ARMADA), where ships have purchase costs, maintenance, victual and munitions costs which must be borne as the ships are used.

TABLE FOUR ICE WAR: TEAM COST EFFECTIVENESS

Team	Vers	Cmbt	Mvmt	Conv	Cost	C/E	Trans C/E	Avg C/E	Rank
Hover/Inf	0.6	5.0	4.0	3.0	2.0	3.6	6.0	4.8	1
Hover/Tank	0.2	7.0	4.0	4.0	3.0	1.0	6.0	3.5	2
Sled/Inf	0.5	6.0	4.0	4.0	2.0	3.5	3.5	3.5	2
Sled/Tank	0.2	8.0	4.0	5.0	3.0	1.1	3.5	2.3	3

Another refinement to the basic technique is "discounting" future costs and benefits, reducing future dollar values to present values in order to account for such things as inflation. The analyst tries to avoid incorporating different value dollars into his calculations.

The method of benefit cost analysis has proven its worth in many projects from helium production in Texas to L-5 space colony planning. A wargamer can use a simplified version of the technique to examine different alternatives in a game, particularly to get a feel for which units will prove themselves superior in the long run. However, there are some cautions to remember.

The first caution will be familiar to anyone who has studied computer programming: "GIGO", garbage in, garbage out. An analysis and its model are no better than their assumptions and the care which has gone into making them. As seen in CREATURE, the results can be very sensitive to changes in assumptions. Practice in playing the game will reveal which assumptions need to be re-examined and which need to be discarded.

The second caution is against planning for its own sake. It can have a seductive appeal. Many analysts get lost in their mass of charts, graphs and printouts. Time can slip away. Opportunities can be lost because critical projects never got past the planning stage. This is the "marginal utility of planning". An analyst must weigh, sometimes intuitively, the value of that extra bit of analysis: is the closer, longer look worth the extra time, effort and expense? There really is a point where the analyst must say, "Close enough for government work."

Third, this method will probably never produce brilliance. It is not an optimizing method where the best answer of all possible answers miraculously appears. Compromises are made at each step to keep the analysis manageable. By balancing factors, the process is itself a compromise. Instead of "what is best?", the analyst must often be satisfied with "what will do?"

Fourth, the end product of this method is to help the decision maker make decisions. As it was presented here, it is a tool to help a wargamer assess the relative value of the units available. If the analysis does not appreciably help that decision, its costs in terms of time, effort and money, could have been better spent elsewhere.

The recommended technique in decision making would be to first buy those units essential to the victory conditions (the pressorships for the HOLY WAR Sunthrowers, for example). Then, buy units in descending order of cost effectiveness. Each decision must be tempered by judgment, as there are unquantifiable benefits and costs. Only the good sense and experience of the player can temper the deceptively simple ratios.

I have attempted to illustrate a "real world" technique and show how wargamers can use the same method. The wargamer faces the same decisions in simpler form as real commanders and politicians. Obviously, an indepth analysis of every game is neither worthwhile nor even interesting. However, a successful game is one which compels the player to assume the role of commander in his mind as well as on the map. As a wargamer, you are more than merely a means by which cardboard counters are moved. Wargaming is exercised not on paper, but in the mind.

BIBLIOGRAPHY

AFR 178-1, *Economic Analysis and Program Evaluation for Resource Management,* 28 Dec 73.

AFP 178-2, *Wing/Base Level Management Analysis,* 18 Nov 70. Excellent source.

AFM 25-1, *USAF Management Process,* 15 Oct 64.

Handbook of Economic Analysis, 2d Ed., Defense Analysis Council, no date. I got this as a photocopied handout in graduate school. It is the single best source I found and is the basis for the approach in this article.

Herber, Bernard P., *Modern Public Finance: The Study of Public Sector Economics,* Richard D. Irwin, Inc, Homewood, Illinois, 1971.

Hinrichs, Harley and Taylor, Graeme M, *Program Budgeting and Benefit Cost Analysis,* Goodyear Publishing Inc., Pacific Palisades, CA, 1969.

AGAIN, HARMONIUOS FISTS

by David James Ritchie

One of the small joys of writing for publication comes when those ideas which one so casually tossed into the faceless void come echoing back as new articles from interested readers who have been inspired to put their own ideas down on paper. Since TSG no. 16 carried my article, HARMONIOUS FISTS IN MELEE, in which I made some preliminary suggestions for incorporating martial arts and Oriental weaponry into MELEE, I have heard my share of echoes. Experience has shown some of the ideas presented in the original article could do with some elaboration and revision. Accordingly, I offer the following update of HARMONIOUS FISTS.

DOIN' THAT HOODOO

The essential supposition underlaying the inclusion of special rules governing the martial arts and Oriental weaponry in the MELEE framework is that martial artists and their weapons differ in some fundamental respect from other warrior types and their traditional slash and bludgeon approach to mayhem. If the skills of the martial artist were readily attainable to the mass of characters and differed only in the degree of strength or dexterity required of the practitioner, then simple augmentation of ST and DX would suffice to cover the effect of martial arts training. Similarly, if Oriental weaponry were all of the cut and bash variety, requiring no special training but only a general familiarity with one's weapons, there would be no point in taking them into account in MELEE situations.

Yet, there is substantial evidence that the marital artist is a superior type of individual in certain respects. The special skills of a 4th Dan in Goju Ryu are unlikely to be duplicated by anyone (no matter how strong or dexterous) who has not had that same specialized training. The attainments of the fully trained martial artist are, in fact, so different in scale and kind from the commonly understood abilities of other types of combatants and athletes as to make what they do seem like voodoo. To the initiated, such artistry as that of Oyama is a function of proper training, not magic. Simply put, all martial arts derive their peculiar effectiveness from a superior form of preparation for combat or mock-combat.

The core of all martial arts is kata (form). Essentially, a kata is an intricate and precise form of ballet performed according to rigid prescriptions. The kata incorporates a number of movements in the form of kicks, punches, throws, etc. which the pupil must master. Each movement is performed in sequence, and judged by standards more demanding than those used for judging Olympic contestants on the parallel bars. Failure to place a foot properly one time during a fifteen minute exercise can be grounds for disqualification for advancement. Olympic standards merely mandate the loss of points. Such rigid insistance upon form is not gratuitous. The forms of all kicks and punches have been worked out over centuries according to scientific principles of balance and movement. The difference between a punch which possesses sufficient energy to kill a bull and one which recoils from bruising a Junebug is a matter of a few millimeters placement, and a fraction of a second difference in delivery time. Kata is an attempt to instill in the pupil the ability to kill a bull every time by the use of patient rehearsal to insure the same punch is delivered in exactly the same way, the body in perfect balance, the mind at rest, the movement automatic. . . every time.

It can be useful to compare martial arts and ballet. Indeed, martial arts has more in common with ballet than modern combatatives. Just as the prima ballerina polishes each turn of the leg and flutter of the hand to perfection until the actual payoff, the live performance. So does the martial artist polish his routine. Ultimately, for both individuals, their bodies begin to move without conscious direction. The mind and the emotions are subdued (though always present in the background). The body is freed from chains of doubt, moving with natural grace and sureness. The slashing attack of the beserker can no more compare with the surity of the martial artist in action than can the frenetic twitching of Dori-Duz-the-Disco-Queen compare with Yuriko Kamura's delicate physical poems.

Now, all of this waxing lyrical may seem inessential, but when proclaiming a measurement, it is useful to know what is being measured. Knowing something of what constitutes the special nature of the martial artist could eliminate some confusion in the rationalization of his role in MELEE. Basically, in functional terms, the martial artist moves faster and with more surity in certain defined spheres. Within those spheres, he also exhibits more strength (as velocity of delivery and improved leverage). The martial artist may be as clumsy as you or I in executing an unfamiliar task, but he will demonstrate magic in the execution of his special skills.

A TOUCH OF CLASS

For purposes of incorporating martial artists into TFT, the following rules are suggested:

1) While employing ST, DX and IQ in the same manner as other characters, "Martial Artists" are considered a special class of character in that they are permitted certain functional benefits in combat at the expense of slower character development. Any character (including wizards *and* warriors when using WIZARD rules) may be designated a Martial Artist at any time between MELEE arena combats or between quests when playing a campaign. Existing characters which are designated Martial Artists immediately gain the benefits of their class, but lose all accumulated DX in excess of 12 and ½ of all ST in excess of 12. IQ is not affected. Newly-created characters may be designated Martial Artists when created, without suffering any loss of DX or ST. This rule reflects the loss of comparative abilities when one ceases to do things in an established manner, and begins learning to do the same things in a new and unfamiliar way. Further, the intent of the rule is to restrain players who might attempt to build a normal character into Arnold Schwartzenbicep over a period of time and then, unrealistically designate this muscle-bound moron a black belt in Kung Fu.

2) Martial Artists do not benefit from experience in the same manner as other characters. The experience of cut and thrust combat is, indeed, a vital part of their education, but it is far less important than is solo practice. The sparring and fencing which make up the main experience of other warrior types is simply less valuable to a Martial Artist than to his uninitiated brethern. Accordingly, while Martial Artist types gain EP's in the normal manner, the value of those EP's for purposes of conversion into attributes is lessened. It costs a Martial Artist 200 EP's to gain 1 additional point of DX or ST. IQ points may be purchased at the normal rate of 100 EP's per point.

3) Martial Artists are the only warrior types who can employ certain weapons at full force. In addition, certain weapons (not necessarily those limited to Martial Artists) require a minimum DX in order to be used to effect. Sha-ken, kendo stick, manrikigusari, nunchaku, bokken, wakizashi, katana, tonfa, sai, jutte, escrima, kumade and naginata are weapons which may only be used to full effect by warriors who are classified as Martial Artists, and who possess the minimum DX required to employ each particular precision weapon. Characters who do not meet these criteria may not be initially armed with such weapons. They may pick the weapons up during melee, but any attempt to use them is resolved at half effect (round down the number of hits scored before deducting for his absorbed by armor, shields, etc.). Further, there is a penalty of –2 DX imposed on unqualified characters attempting to hit with precision weapons. Characters who attempt to employ other weapons not listed herein, but which require a minimum DX not possessed by the character, are penalized in accordance with this rule. For details, see THE ORIENTAL WEAPONS TABLE.

4) Martial Artists may perform certain feats not possible to the untrained. They may choose a SHIFT AND DEFEND option even when unarmed. They may also choose a CHARGE ATTACK option while unarmed. When choosing a SHIFT AND DEFEND option, the Martial Artist receives certain special benefits. SHIFT AND DEFEND works for the Martial Artist in the same manner as it works for other characters except that, additionally, characters attacking Martial Artists in a SHIFT AND DEFEND may suffer counter-measures. If such characters miss their initial die roll to hit, the Martial Artist may roll to hit. If the Martial Artist is successful, the appropriate number of hit dice is rolled for whatever weapon the Martial Artist may have used. Counter-measures may score hits in the normal manner. In addition, if the Martial Artist scores a hit for effect (not absorbed by armor, etc.) on his opponent, that opponent must roll his adjusted DX or lower, on three dice or he is considered "thrown" and falls to the ground in a hex of the Martial Artist's choice, but within hexes of 'front' for Martial Artist. Martial Artists who choose the SHIFT AND DEFEND or DODGE options may choose to deflect a thrown weapon which enters his hex by rolling his DX on 3 dice. Similarly, a missile may be deflected on a *4-dice* DX check. The deflected weapons fall to the ground in the Martial Artist's hex. These techniques require a certain minimum DX, not simply the designation "Martial Artist" after a character's name. For details, see THE MARTIAL SKILLS TABLE.

ARMS AND THE MAN

THE ORIENTAL WEAPONS TABLE contains a relatively complete listing of the sort of weapons which the average Japanese, Chinese or Indian warrior might encounter in an adventure set in the peroid 600-1700. These are in addition to those weapons which are the province of the Oriental Martial Artist. Opposite each weapon is its damage potential, the minimum ST and DX required to employ the weapon where appropriate, the DX penalty imposed on a character using the weapon to disarm an enemy (or, in the case of the kumade, to pull him to the ground) and note regarding special weapons capabilities. In some settings, a version of the broad sword, a two-handed sword (Moro variety) or even a cutlass might be included on this list.

Two new weapons have been added since TSG no. 16. The first is the Kumade, or bear paw. This weapon is, literally, an iron likeness of a bear paw affixed to a pole. The purpose of the weapon is to hook an opponent's armor and drag him to the ground. The weapon is easily capable of penetrating a steel cap, and should be considered about as effective as the hooks used by the English to pull down the first line of French skirmishers at Agincourt. The naginata is a sort of great glave with a blade up to 4 feet long. Used with great slashing strokes, it can cut a man in half without much trouble. A more precise method is the use of the naginata to make a figure eight of swirling steel through which no attacker can penetrate. Legend says a Mii-dera monk named Tajima used his naginata to deflect the arrows fired at him during the battle of Uji (a feat which earned him the sobriquet of Tajima the Arrow-cutter).

The armor common to the Orient includes everything from simple leather jerkins to lightweight Indian mail to the rigid plate armor first favored by the Chinese. All MELEE types should be employed. In addition, there is one type of armor peculiar to the Orient which is not covered by the MELEE rules. This is Asiatic "lamellar" armor. Lamellar armor is a scale type armor manufactured by binding pieces of steel or heavy hide into plates of varying lengths (depending upon where in the armor they are to be used). These plates are then sheathed in leather and lacquered to make them watertight (lamellar thus being the only all-weather armor). Once the plates are finished, they are laced into overlapping segments using strong silken cords. The result is a supple, yielding, but almost impermeable protective suit which relies upon deflection rather than rigidity for effect. Protectiveness is akin to plate armor while effect on movement and dexterity is comparabel to chain mail. Lamellar armor was primarily of two types: Yoroi, the horse armor, a box type much favored by Japan's Samurai and Haramaki, the round, less cumbersome footman's armor (also favored by the Chinese). YOROI LEMALLAR absorbs 5 hits per attack at a DX adjustment of –5 and allows a MA of 6. HARAMAKI LAMELLAR absorbs 4 hits per attack at a DX adjustment of –4 and allows a MA of 7.

MAGICAL MYSTERY TOUR

The Oriental Monk, holy man, lama or whatever one chooses to call him has been an object of fascination to Westerners for nearly two centuries. The often superhuman qualities attributed to such individuals make them wondrous characters for use in any fantasy world employing an Oriental theme. Since such figures are often portrayed as followers of some zen-oriented martial art, they may appropriately be discussed herein.

Generally, Oriental monks are possessed of special powers of self-control, making them especially dangerous. The blind monk who sees better than the sighted and whose inscrutable wisdom is an infallible guide to success may be considered archetypal. The defining characteristic of the Oriental monk for our

purposes might be an infinite self-mastery born of long meditation upon the wheel of the universe, etc., etc. The following rules are offered as a possible treatment of this character:

1) Monks constitute a special class of character encompassing all Oriental holy men of whatever persuasion. All Monks are considered Martial Artists and, rules which apply to Martial Artists also apply to all Monks. In addition, Monks are possessed of special skills dependent upon their IQ.
2) The primary advantage accruing to Monks is the ability to choose a special option: THE SUMMON KY option which functions in most respects like a normal WIZARD spell. Any Monk may choose to summon his Ky, at any time. This option represents the choice to engage in a form of meditation designed to gather the individual's internal resources of psychic energy, making the character temporarily more powerful. It costs the Monk 1 ST to choose this option (payable immediately before any action is resolved). Unless the character who is summoning his Ky suffers one or more hits of effective damage during the Turn in which the Ky is being summoned, the attempt is automatically successful. The expended 1 ST is still lost. Once summoned, Ky remains controlled for 12 Turns. The effect is as follows: For every 2 IQ points above 10, the Monk who summons his Ky increases his ST *and* DX by 1 point each. Since summoning Ky is essentially a meditational technique and not a spell, both warrior and wizard type characters may use this option. Otherwise, treat as in IQ 10 spell.
3) During any turn on which a Monk summons Ky, that character must remain inactive. It cannot move, attack or effectively defend. Concentration is considered to be elsewhere, making the figure easier to hit effectively. Thus, when rolling to hit characters which are summoning Ky, the attacker automatically hits on any roll except 17 or 18 (which has the same, normal effect). This rule applies to all adjacent attacks (physical or magical). Missile and thrown weapon attacks or spells are resolved at +2 DX. Attempts at HtH combat are automatically successful (bot characters grapple), and the firs combat are automatically successful (both combat are automatically successful (both characters grapple), and the first HtH attack on a character torn from meditation is at +2 DX.
4) In addition to the special ability to summon Ky, Monks are considered to live in a somewhat heightened state of awareness normally. In consequence, Monks have their IQ and DX raised by 1 for all saving throws.
5) Those desiring to keep Monk type characters from being too tough should agree before hand to limit wizard Monks to the use of certain garden-variety spells (no super-strong black magic), and warrior monks to the employment of certain limited weapons types or to defensive options.

IN CONCLUSION

Those who read my original article will note certain changes in approach herein. In addition, I have decreased the power of a number of weapons to make them seem less magical. Based on experience, the new mix of weapons works quite well. I have incorporated some of Ronald Pehr's ideas into this article and I recommend players use his rules regarding self-damage for bare-handed attackers from TSG no. 18 as being infinitely superior to my own initial concepts. I still think my damage chart in TSG no. 16 is valid and recommend it be used with these rules. Hopefully, they provide a more organized framework for adding martial artists and Oriental weapons to your MELEE/WIZARD campaigns. Now, if only Metagaming will come out with a microquest called THE GANG OF FOUR AND A DWARFISH LAMA ENTER THE GARDEN OF THE BLACK CHRYSANTHEMUM or suchlike, I will really be satisfied.

SKILL	DX	NOTES
SHIFT AND DEFEND BARE-HANDED	12	Same as SHIFT AND DEFEND, but no weapon needed
CHARGE ATTACK BARE-HANDED	13	Possibility of self-damage
SHIFT AND DEFEND (COUNTER-MEASURE)	14	Possibility that attacker will be damaged
DEFLECT THROWN WEAPON	15	3-dice saving throw needed
DEFLECT MISSILE WEAPON	16	4-dice saving throw needed

Only Martial Artists with the requisite DX may employ these options (or, in the case of counter-measures stemming from a SHIFT AND DEFEND, benefit in this manner from the option). To deflect a thrown weapon or missile weapon (not spell), the character must have chosen a SHIFT AND DEFEND or DODGE option that Turn. The missile or weapon is deflected and drops at the character's feet upon a die roll of DX or less on the appropriate number of dice. A character is never obligated to attempt a deflection.

HAND WEAPONS

WEAPON	DICE	ST	DX	DIS	NOTES
DAGGER*	1-1				1+2 in H2H combat
SAI	1-2		13	–2	May defend/attack as main-gauche
JUTTE	1-2		13	–1	Same as for sai
ESCRIMA	1-3		12		Incapable of killing
TONFA	1-2		12		Same as for sai
SHA-KEN*	1-1		12		See TSG no.13
CLUB*	1	9			
MANRIKIGUSARI*	2-2	9	13		See Bola Rules-TSG no.13//1-2 in H2H
KENDO STICK	1+2	10	12	–3	
NUNCHAKU*	2	10	15	–2	1 in H2H combat
BOKKEN	1	10	14	–2	Incapable of killing
WAKIZASHI	2-1	10	13		Same as for sai
SHORT SWORD	2-1	11			
MACE*	2-1	11			
SMALL AX*	1+2	11			
KATANA+	2+1	12	14		
BATTLE AXE+	3	15			

POLE WEAPONS

JAVELIN*	1-1	9	12		See Pole Weapon Rules in MELEE
SPEAR*+	1+2	11	12		See Pole Weapon Rules in MELEE
KUMADE	1+1	11	12	–2	DIS number is for causing fall
NAGINATA	2+1	12	13		See Pole Weapon Rules in MELEE

MISSILE WEAPONS

THROWN ROCK	1-4				As per MELEE
SMALL BOW+	1-1	9			As per MELEE
HORSE BOW+	1	10			As per MELEE
LONG BOW+	1+2	11			As per MELEE

** = may be thrown; + = two-handed weapon*

News & Plugs

GAMING CONVENTIONS

WinterCon VIII: (Nov. 16-18) The winter version of MichiCon. WinterCon is sponsored by Metro Detroit Gamers (probably the best gaming club in the country), and the con has all the usual features. Info: MDG, 2616 Kenwyck, Troy, MI 48098.

WarCon '80: (Feb 1-3) Memorial Student Center, Texas A&M University, College Station, Texas. Board games, role-playing, miniatures, seminars, demonstrations, auction, films, and a presentation of micro-computer games. Metagaming will be sponsoring tournaments for several of its games. This is the oldest and best gaming con in Texas. Info: WarCon '80, Box 5718, College Station, TX 77844.

DunDraCon V: (Feb 16-18) Villa Hotel, San Mateo, CA. The convention includes tournaments in Dungeon, Cosmic Encounters, D&D, and others, as well as films, seminars, and computer games. Info: DunDraCon V; 386 Alcatraz, Oakland, CA 94618.

SimCon II: (March 22-23) River Campus at the University of Rochester, Rochester, New York. The convention will include tournaments in D&D, MicroGames, Diplomacy, Cosmic Encounters, and many others. Info: SimCon II, Box 5142 Riverstation, Rochester, NY 14627.

SCIENCE FICTION CONVENTIONS

ConClave: (Nov 2-4) Ramada Inn Metro, Romuslus, MI. GoH: A. E. Van Vogt. Mem: $6 till 9/1, $20 after. Info: EMU SF Society, 117 Goodison, Ypsilanti, MI 48197.

NutriaCon: (Nov 30-Dec 2) Grand Hotel, New Orleans, LA. GoH: Karl Edward Wagner, BobTucker, George Alec Effinger. Mem: $6 till 10/31, $9 after. Info: Tom Longo, 6221 Wadsworth, New Orleans, LA 70122.

ChattaCon Five: (Jan 4-6) Sheraton Downtown, Chattanooga, Tenn. GoH: Joan Vinge. Mem: $7 till 9/30. Banquet $10. Info: ChattaCon, PO Box 211173, Chattanooga, TN 37421.

AggieCon XI: (March 27-30) Texas A&M University, College Station, Texas. GoH: Poul Anderson. Films, panels, art contest, more. Info: AggieCon XI, PO Box 5718, College Station, TX 77844.

Noreascon 2: (1980 World SF con) (Aug. 29- Sept. 1) Boston, MA (more later)

HUGO AWARD WINNERS: Novel: Dreamsnake, by Vonda McIntryre; Novella: Persistence of Vision, by John Varley; Novellete: Hunter's Moon, by Poul Anderson; Short Story: Cassandra, by C. J. Cherryh; Dramatic Presentation: Superman.

NEW GAMES

FREEDOM IN THE GALAXY is Simulations Publication's game based on *Star Wars;* only the names have been changed from the movie. The rules provide for planetary defense bases, rebellions, creatures on the different planets, local mobs, hyperspace jumps, robots, spaceships, sovereigns, secret rebel bases, Imperial atrocities, the DeathStar (alias Planetary Stabilizer), interrogation and torture of prisoners, and more. The game system is like WAR OF THE RING, but much more complex. Several scenarios are provided, but the full Galactic Campaign game is rather long (estimated playing time 20 hours). It is available for $20 from SPI.

JOHN CARTER, WARLORD OF MARS is based on Edgar Rice Burrough's Barsoom series. It is not primarily concerned with character-army interactions, like WAR OF THE RING and FREEDOM IN THE GALAXY, but rather is a fantasy-role-playing game. It has several versions. It also is priced at $20.

Avalon Hill's DUNE is based on Frank Herbert's popular novel. It is a fairly simple multi-player game that emphasized alliances between the players (the Bene Gesserit, the Fremen, the Guild, the Harkonnens, the Emporer, and the Atriedes). It includes rules for treachery, spice, storms, sandworms, and psychic abilities. It sells for $12.

Avalon Hill also released MAGIC REALM, a fantasy-role-playing game, and WIZARD'S QUEST, a boardgame. I don't know anymore about them.

Game Designer's Workshop BELTER is about prospecting and mining the Asteroid Belt. Combat occurs between mining cartels and (in the Advanced Game) a government peacekeeping force. The map is of a small section of the Belt, and the units include crews, workers, mining equipment, prospecting ships, transports, and a few combat units.

GDW's SNAPSHOT deals with close combat between individuals on board a spaceship. It is mateable with TRAVELLER, but it can also be played by itself.

THE KUNUNIR is a new Traveller supplement, also put out by GDW. It is an adventure aboard a battlecruiser.

TUNNELS AND TROLLS, an FRP game, has been revised and re-published, with new illustrations. It is available for $8 from Flying Buffalo Inc., PO Box 1467, Scottsdale, AZ 85252.

SPACE QUEST is a space role-playing game. It is explained in a 110-page book, available for $9 from Tyr Gamemakers, LTD.; PO Box 414, Arlington, VA 22210.

A new, but well-financed game company called Yaquinto Publications, has started off with eight boxed games. Two of the designers, Steve Peek and Craig Taylor, used to work for Battleline Games, now out of business. Four of the games are historical and four are fantasy/sf oriented. ULTIMATUM is a near-future game dealing with possible nuclear war. STARFALL is a strategic (I think) space game. TIME WAR is about time travel. THE BEAST LORD is a WHITE BEAR AND RED MOON type fantasy boardgame.

Yet another company has entered the under-$5-sf-game market. Task Force Games, headed by Stephen Cole (formerly editor of JADG-PANTHER), has introduced STARFIRE, ASTEROID ZERO-FOUR, CEREBERUS, and STARFLEET BATTLES. The first three sell for $3.95 and the last sells for $4.95. STARFIRE is a ship-to-ship combat game, with scenarios about space battles in a future war. CEREBERUS deals with the invasion of an Alien-occupied planet. ASTEROID ZERO-FOUR is about a war between Americans and Russians in the asteroid belt. STARFLEET BATTLES is based on *Star Trek.*

HERITAGE MODELS SOLD: Our source disclosed that Heritage, one of the largest gaming firms, has been sold to a Texas millionaire. Jim Oden, president and majority stockholder, apparently felt this was better than potential bankruptcy. Rumors had been circulating about Heritage's impending demise for several months.

THE MERCENARY, a new gaming fanzine, deals with the smaller game companies. Write to The Mercenary, 6720 Chickasaw Drive, Fort Wayne, IN 46815.

DIFFERENT WORLDS no. 4 has articles about selling game designs, enchanted weapons, Star Trek, and a RuneQuest adventure. This is a professional-looking magazine dealing primarily with FRP games. Published by The Chaosium, PO Box 6302, Albany, CA 94706.

The Case of the Missing Micros

by Tim Solis

This is the city. Los Angeles, California.

We have everything to offer when it comes to gaming. D&D, WarpWar, Traveller, Stellar Conquest, you name it. But when someone gets too grabby and steals them it becomes my business. . . . . I carry a badge.

July 9, 9:59 a.m., it was a hot day at civic center. We were working the day shift on burglary. My name's Thursday because Friday was already taken. My partner's name is Blue Monday. The boss is Captain Big Wednesday.

"Well, Blue," I said, "looks like we better do what the taxpayers of this city pay us for."

"Right. Which coffee shop do you want to lounge around at today?"

"I don't know. Better not stay at just one. We'll look busier if we visit three or four."

Just then the phone rang. Blue and I tried to ignore it, but the Captain came into the room and made me pick it up, mainly because he thought his creditors were after him again. Unfortunately, it was a citizen in distress. Everyone in the division drew straws to see who would go out to investigate. I lost, but I didn't care. I figured that after we filed this report we could kill the rest of the shift at the Burger Queen.

12:04. We entered Alfredo's Exclusive Hobby Shop, located on Rodeo Drive. Alfredo's does a brisk business selling various games and science-fiction paraphanalia. The proprietor, a Mr. Dubois told us what happened:

"I opened up at the usual time and went about my regular routine until I noticed the back door to the stock room was open. Well, I got out my inventory sheet to add up the loss, but to my surprise I got off pretty lucky."

"How's that?" I asked.

"I've got over a thousand bucks in merchandise and near as I can figure they only took five games."

"Could you give us a description of the missing items?"

"Sure. They're MicroGames."

"MicroGames?"

"Yeah. They're about 8" x 4½", come in a little plastic bag, and have on the cover the letters G.E.V."

"G.E.V.?"

"Yeah, it's MicroGame no. 8."

"Okay" I said, "We'll contact you again if anything comes up."

Blue was looking at another MicroGame.

"You know, Joe, I think my kids would like this. I think I'll get it."

"I wonder. What's it about?"

"Read the back, Joe."

"Okay, 'The Webbies want your mind. And unless the U.N.'s daring raid on Mars succeeds, the Web will enslave humanity. . .' Hmmm. . . There's only one thing that bothers me."

"What's that?" asked Blue.

"I didn't know the Internal Revenue Service was on Mars. . ."

Blue took the game and another one called Melee up to the counter. He put the games on the counter, kept a poker face, and feigned reaching for his wallet. The clerk didn't get the message.

"Will that be cash or charge?" he asked.

Blue reluctantly went for his wallet, but I went over and stopped him. "Get the manager over here," I ordered.

"Yessir."

The manager came over. How much do these games cost?" I asked.

"Well, it looks like you've got about six dollars worth there."

"You know," I said. "This is a pretty nice store. I'd hate to have the fire inspector come over here and write up a few citations. Now, how much are those games?"

"Oh. . . Uh, no charge."

"Thanks." By now it was 1:30.

1:40. It took us ten minutes to get out of the store because a few of the customers mistook us for a couple of robots.

2:00. We ate lunch at the station. Afterwards, Blue and I tried out one of the games.

"Okay, your move," Blue said.

"Alright. Watch this." I said, picking up the dice. I rolled a twelve--a hit. I rolled for the damage and got an eight. Blue's figure bit the dust.

"I just can't understand it. Where did I go wrong, Joe?"

"Simple. You forgot one thing."

"What's that?"

"Never send a hobgoblin to do a giant's job."

4:13. We had received over twenty calls all over the metropolitan area from hobby shops that had been knocked over for the express purpose of stealing the G.E.V. MicroGames. I had a strong inkling that a pattern was developing. . .

4:34. Quitting time. We were just about to close up the shop when Blue noticed his games were missing.

"I left them right here," he said, pointing at the desk.

"Look over there, Blue!"

In a far corner of the room I spotted a snot-nosed little kid playing one of the games. We drew our service revolvers and ordered the suspect to lie prone on the floor. He complied, and after several hours of questioning and threatening to show him old Dragnet episodes, he finally confessed. I admit we thought we had this one wrapped up. Not only did he confess about the MicroGame caper, but we also got him to admit to three other unsolved crimes; even though he couldn't have committed one of them because he wasn't born when it happened! I was glad we were finished for the day. I still had time to shakedown the ice cream man who would be coming down my street in a while.

5:03. Blue and I were caught trying to sneak out of police headquarters after learning that the snot-nosed kid put the finger on us. How was I to know that he was the Chief's snot-nosed kid?

9:15 a.m., Wednesday, July 10. I feel pretty good considering that I had to spend the whole night cleaning prisoner cells at the county jail. Luckily for me, the case of the missing MicroGames is now in the hands of someone else.

4:10 p.m., Monday, September 14. I'm still officially off the case, however, the following things have now come to light:

ITEM: The CIA has intercepted radio transmissions coming from the Ural mountains in the U.S.S.R. It has been learned that the Soviets are quickly building large factories in this area. So far, the CIA has only been able to decipher one Russian code word: Ogrenski.

ITEM: The FBI has located one of the missing MicroGames and has turned it over to the President. Unfortunately, he can't seem to get it open and has called out the Army Corps of Engineers to advise him on the matter. His daughter, Amy, has promised to explain the rules to him when and if he ever opens it.

ITEM: The Senate committee on weapons research has obtained a few copies of the game and seems interested in implementing weapons of this type, but are unable to do so because they are convinced that the rules are in some type of code.

ITEM: Metagaming, the company that makes MicroGames, has just received an order for 136 of MicroGame no. 5; also known as RIVETS. The order was placed by the Argentinian government. Meanwhile, rumor has it that Chilean agents are attempting to negotiate the building of Boppers with the designer of RIVETS in order to keep one jump ahead of Argentina. Both countries are poor and cannot afford more sophisticated weaponry. . .

ITEM: Since Skylab fell, there has been growing concern by some internationally known scientists that it did not fall by its own accord. Rather, it was knocked out of orbit by aliens who, after accomplishing this dastardly deed, will set their sights on converting our atmosphere into theirs.

As for me, I'm not on burglary anymore. My partner, Blue, has been transferred to traffic control. I'm now in the public relations division of the department. You know, go out to the schools, show the kids the right way and wrong way to cross the street, bicycle safety, things like that. But I still get home in time to shakedown the ice cream man for a free popcicle. That's another strange thing; yesterday, after bumming another ice cream off of him, he told me that he had had it with me and my freebies. Then he said something about that if I ever bothered him again he'd give me a Magic Fist. I guess that's a new type of ice cream bar. Anyway, I'll find out when I shake him down today.

The story you have just read is false. The names were changed to protect the guilty (except the writer, who originally wrote this story in crayon because, where he lives, they have to be careful not to let him play with anything sharp such as a pen or pencil).

Cyborg

a review by W.G. Armintrout

Title of Game: CYBORG--The Ultimate Adventure
Publisher: Excalibre Games Inc.
Designer: not listed

Fidelity of Simulation ("Realism"). 8
Physical Quality. 8
Graphics 6
Bookkeeping (Player Aids). 3
Rules Clarity. 2
Playability 8
Game Speed 8
Game Balance 7
Game as a Whole . . . . . .?

Anyone who thinks writing a review is easy hasn't done it. Yes, it's a lot of fun seeing your name in print, and your opinion on display. But there is also some real anguish. It is a lot like receiving a proposal of marriage--you hate to say "no", but you're afraid to say "yes".

This review has been very hard to write, as you'll see when I come to my conclusion. Meanwhile, let's look at Excalibre's CYBORG in several crucial categories:

FIDELITY OF SIMULATION: What is CYBORG all about? The advertizing can tell us the whole story --

> *CYBORG is an adventure game that pits a beautiful princess, her Amazon companions and powerful Cyborg guardians against a horde of hideous mutants, evil wizards and deadly terrain. The game includes a one-to-one combat system, 240 die-cut counters, large playing map and very playable rules.*

Obviously this is not a detailed military simulation, and it would be silly to evaluate it on that basis. Instead--is it faithful to its premise? Does it really play like a Princess VS the Evil Bad Men game?

"Yes. . ." This is not at all a traditional wargame, and that is a real plus for CYBORG. Just like Milton Bradley makes wargames, this is a wargaming version of those childrens' games you see in stores which feature all the current TV show heroes. Princess Gloriana and her loyal followers begin the game on the hex marked START. Three roads lead from there to the destination-- the Holy City (though Gloriana does not have to stick to the roads). Terrain features sound like they came from Saturday morning TV: the Snake Pits of Lacnar, piranha-infested Caribe River, the Hatching Grounds of the Gargoyles, etc. And the other player, Gloriana's evil aunt Aemulatio and her Necromancers, is not content to merely *kill* the princess. . .they specifically want to throw the princess into the volcano Immolare! No WOODEN SHIPS AND IRON MEN, ladies and gentlemen. . .but it sure sounds like fun!

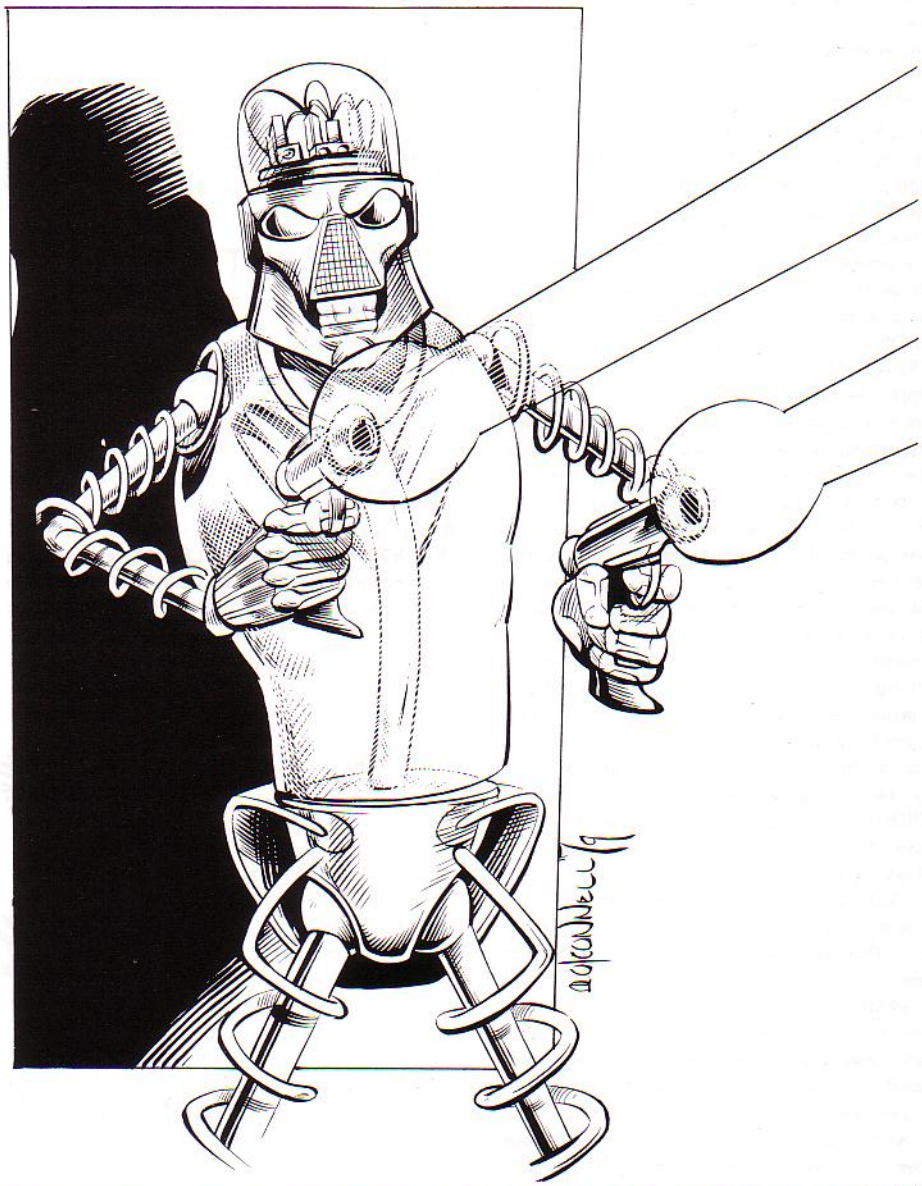
Forces range from the fantastic but few troops of the princess -- Cyborgs, Amazons, and Imperial Guard, plus pitiful regiments of Villagers -- to the numberless hordes of Mutants and flying gargoyles which follow Aemulatio. Each side also has its resident magicians. Gloriana has boats and airships to aid her fight, but these are at the wrong end of the map -- at the destination.

It is hard not to like a game like this. It is automatically familiar to us, unlike those other games where it takes ten pages of material to clue us in as to what is going on. But, there are some flaws. . .

Combat is NOT person-to-person, not unless these are weird people--only a single counter fills an entire village. Magic is conducted by die roll, with magicians having no choice in what spell they cast. I wish Aemulatio had more variety of troops -- just mutants and gargoyles seems limiting. And I have a minor complaint about the initial set-up: Princess Gloriana is supposed to be fighting her way to the Holy City to assume the throne of her dead father. Why, then, do most of Gloriana's forces start with her in the START box, while only a few are stationed in the Holy City? Shouldn't Gloriana have just a few loyal troops with her to begin the game?

But, all in all, I find that I *believe* in CYBORG. I give it an "8" here.

PHYSICAL QUALITY: The components are fine quality, as can be expected from Excalibre. The mapsheet is 28" x 23", printed in blue and brown on heavy duty paper. The terrain types-- river, lake, mountain, forest, farmland, village, marsh, radiation zone--are easy to distinguish. The counters are die-cut and printed in dark colors (red for Aemulatio, green for Gloriana) that are easy to tell apart. Unfortunately, the counters are mostly blank because the artist drew the sillouette low in one corner, the movement factor in another corner, and the label in tiny print over the top. It is hard to tell the counters of one side apart. The rulesbook is printed on slick paper (two 8½ x 11 sheets) enclosed in a protective folder, and does not contain a single spelling error! Except for the counter problem, I am happy with the components -- "8".



GRAPHICS: The motif is comic book, and the artist is R. P. Winther. His work is almost uniformly terrific. The sole exception is the front cover art. This piece of art is probably the worst drawing of a neo-naked princess I have ever seen. One mistake, but a big one -- only a "6" here.

BOOKKEEPING: A heavy yellow page holds the C.R.T. on one side and the Order of Appearance chart on the other. Very nice. . . but the player aid doesn't agree with the rulesbook! Retreat rules are re-explained in a totally different fashion, a new rule about wounding the princess is sketchily mentioned, and the C.R.T. is cluttered with gimmicky symbols: DS (Defender Slain), DE (Defender Eaten), DB (Defender Blasted), DM (Defender Melted), and DD (Defender Disintegrated). This kind of player aid is of no aid at all -- "3".

RULES CLARITY: In their house magazine, *Tactics & Strategy,* Excalibre explains its devotion to "pure and simple" science fiction games. So far as rules go, this seems to mean "pure and *sloppy*". To cite problems: No terrain rules for rivers, which dominate the map. Does "Only one unit may attack one other unit per turn" really mean what it says? No units may be forced to retreat into fatal terrain, but a whole rules section covers that point anyway. Boats are provided in the game, and an island is a crucial strategic locale, but no rules are given for landing troops from a boat. An unclear rule seems to indicate airships may be attacked in the air only if they are flying off the coast, while boats may never be attacked (not even by flying gargoyles). In all fairness, these rules problems can be settled by a pre-game agreement among players -- it isn't as if you have to write your own rules. Still, a game should be self-explanatory. I give CYBORG's rules clarity a "2".

PLAYABILITY: Easier than most Micro-Games. Movement is by expending movement factors according to terrain, with flying units disregarding terrain. Magic is cast by rolling a die. For combat, the attacking unit references its type versus the defender's type on the C.R.T. This provides three possible results of equal probability, and a die roll choses the final result. With only three possible results, it is easy to make generalizations. Mutants always whip Villagers, either destroying them or forcing them to retreat. Likewise, Cyborgs melt right through Mutants. Extremely powerful units -- Aemulatio herself, for instance -- can be totally immune to attacks from such normal units as the Imperial Guard or Mutants. This may seem very simple to most gamers, but CYBORG is designed to match the system -- the whole thing works. It is also easy to play, so I give it an "8".

GAME SPEED: Two or three hours, most of which is spent in actual movement or combat. This will keep your attention on the game. "8" here.

GAME BALANCE: I would say the player commanding Princess Gloriana's forces has a small advantage. He has fewer but more powerful troops, and just one point to defend -- the princess. Gloriana's side is more forgiving of errors, and the superiority of the troops allows for gaining the initiative in combat situations. But, I prefer to play the Aemulatio side. This is most unforgiving -- just a few crucial mistakes, and those Cyborgs can tear apart the enemy. The temptation is great to waste strength by attacking piecemeal with whatever is available rather than to let Gloriana advance while assembling an attacker force for a major assault. However, Aemulatio has those flying gargoyles! These are great for behind-enemy-lines raids to capture the princess. "7" for balance.

GAME AS A WHOLE: Well, here it is. The conclusion. And I don't know what to say. . .

CYBORG is a fun game. It is a challenging game, and the believable premise makes it easier to want to play the game over and over again. It may look like a grown-up version of Monopoly, but it is really a good game.

On the other hand, we are all consumers and the game companies are the ENEMY. If we cast our economic vote by purchasing CYBORG, we cast our vote for sloppy editing, uncorrelative material, and poorly-written rules. There is already too much of that in the industry.

It's a tough decision, and you'll have to make it. Buy a fun game, or boycott a sloppy publishing job. It would be best all around if Excalibre would simply revise CYBORG, edit the rules properly, and reissue the game in a second edition.

CYBORG is available from Excalibre Games Inc., Box 29171, Brooklyn Center, MN 55429, for $8.95.

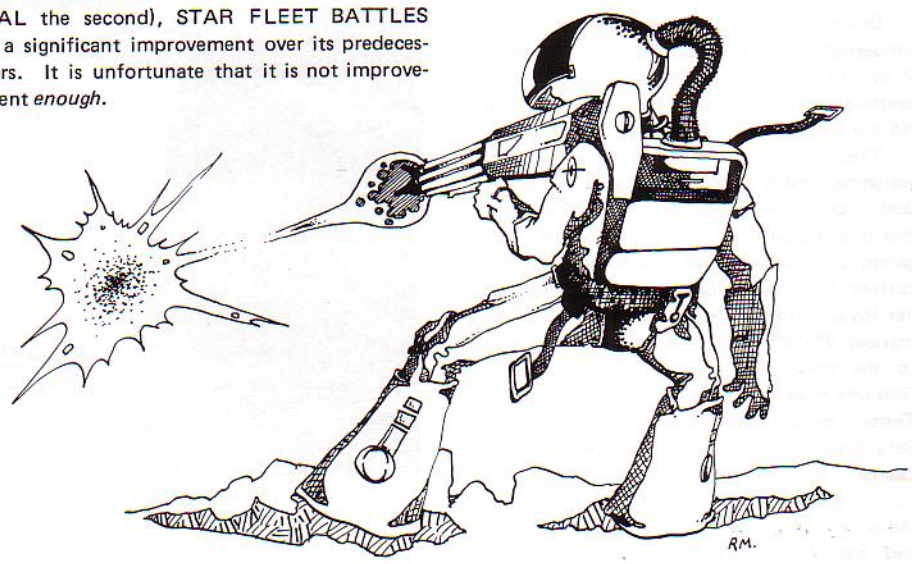
STAR FLEET BATTLES
a review
by
Kenneth W. Burke

STAR FLEET BATTLES is the fourth in a series of games published by Task Force Games, a newcomer to the wargaming field. Being the third Star Trek wargame produced (the STAR TREK BATTLE MANUAL being the first and the STAR FLEET BATTLE MANUAL the second), STAR FLEET BATTLES is a significant improvement over its predecessors. It is unfortunate that it is not improvement *enough*.

STAR FLEET BATTLES comes with a rule booklet (5" x 8½"; 30 pages including cover), a map (17" x 22", sky blue with an SPI style grid coordinate system), ship specification tables, movement tables, and die-cut counters. The counters are quite thin; you must punch them out carefully or their tops will rip off. The rulebook also has problems; its printing is incredibly small and contains errors. The speed of light is presented as being ten thousand kilometers per second, not the *two hundred* ten thousand kilometers per second that it is. The 0-1 range column of the Photon Torpedo reads "Miss" for all combat results when it should read "Hit". Declining educational standards, no doubt.

In STAR FLEET BATTLES, playability can best be defined as *slow.* Its being miniature-oriented means players must take time to fill in their energy allocation sheets, plot their vessels movement patterns, and the like. A movement "mode" system, in which ships with different speeds move at different times during the movement phase, only adds to the slowness. The mapboard proves itself to be too small, allowing the starships little room to maneuver. If each hex represented an area five or ten times the speed of light across, the mapboard would be all right; they don't, though, so it isn't.

Overall, I give STAR FLEET BATTLES a "need for improvement" rating. In their desire to make an "accurate" Star Trek wargame, its designers inadvertently let playability fly out the window, and wound up with a game so complex it makes ALPHA OMEGA look like KRIEGSPIEL. The only silver lining behind this dark cloud of a game is the possibility that someone will someday design a *playable* Star Trek game, along the Avalon Hill WAR AT SEA line. Better still, maybe someone will design a STAR TREK game with optional complexity, like Avalon Hill's revised BISMARCK. In either case, I cannot recommend you buy STAR FLEET BATTLES, unless you are the most loyal SF&F gamer or Trekkie fan imaginable. Even then, you will find STAR FLEET BATTLES to be a colossal bore. The game costs $5.00; it's available at local hobby stores *only*.



Everyday Life in The Fantasy Trip

by

Martin Halbert

All right, anyone with the TFT Micros and some dice can confidently state precisely what will happen when Ysmog the Avid casts a freeze spell at Curmugeon the Craven of IQ, DX, ST blah, blah, blah at range yerpity blop. With these wondrous simulation systems (and don't get me wrong, I think they're great), we have reduced the adrenaline-packed swing of the sweaty warrior into cold numbers, and the meaty chop into subtracted points on lucid, stark sheets of black and white. Fine! Although I sometimes wonder if my shivering worthies would actually hold close to their hearts the logic of the numbers and *really* charge anything as gruesome as a squad of goblins. At least we can bang on the table, rattle the windows, and shout to the high heavens that, b'god, *if they had*, them consarned uglies would've been whipped! Vodka the Stumbling lost *exactly* six strength points, etc., etc.

As I said, fine. But I sometimes wonder between swings of the morningstar what *ordinary* life is like in TFT. I mean, beyond the walls of the arena, out of the gloom of the dungeon, away from the stench of the battlefield. What are those kingdoms like? Of course, they have high towers and walls, but the archeologist in me wonders what kind of lives people would lead in this and other magical worlds.

We picture TFT, D&D, etc., as being set in a continuum analogous to the Middle Ages. Now throw working magic in and let's see what would happen. Several SF/Fantasy efforts have been made in this direction by writers like Poul Anderson, Ursula K. Le Guin, and Larry Niven, a former mathematician in his Warlock series. Niven did a superb job of explaining the nature of *mana,* what he defined as the force behind magic. He explained *how,* but not *why.* Does anybody have any thoughts on just what magic *is?* Sure, wizards gesture cryptically and mumble esoterically and, well, things happen. But *why?* Applied quantum mechanics, ESP, the will of the dread god Yursomosch the Maladroit?

Let's suppose TFT magic is a fifth force in nature, unlike strong and weak nuclear forces, electromagnetism, and gravitation in that, as Niven said, it is controllable to varying degrees by organisms, and controls by varying degrees organisms. Now we have something like Kirliam auras, a kind of force field which all objects possess. Now, given our hindsight of history, what do men (or any sentients) tend to do with a controllable force? One, they discover its applications in warfare. Two, they work on peaceful applications. TFT pretty well covers the military aspects. But, what else can we do with magic?

We, or rather they, can harness it to do work first of all. The easiest way to do so in the TFT rulebook is with illusions. If everyone involved keeps believing, an illusionary creature can do an infinite amount of work at no cost (other than its creation cost). Illusion slaves could be mass produced in magic factories, and nobody in the kingdom ever has to work again. Notice, the rules say illusions vanish the instant their creator dies, wills them away, or goes *unconscious.* Unconscious is much different from asleep, so your golem won't disappear the second the creator wizard turns in for the night. More on all this in a moment.

What about architecture? The wall spell, at 2 ST pts., seems like a viable substitute for bricklaying. What is the load bearing capacity of a magically created wall? How precisely can they be placed in creation? It seems likely that, with practice, a squad of mason wizards could throw up castles faster than an army of slab-hauling pyramid slaves. What about illusion walls? Granted the right properties by their creators, illusion walls could make up skyscraper castles, or even float in air if made weightless. It would be easier to disbelieve in a wall hanging in mid-air, but once the trend was set, the kingdom's inhabitants would find such structures commonplace. Mind you, care must be taken with gawking tourists.

What about art? Any dummy mystic of IQ 8 can whip up an image which is indistinguishable from the original, except it would be destroyed if touched. Anyone knowing the image spell can laugh at the concept of cameras. By creating the image in a bottle, you can capture a scene in 3-D, sound, and smell. These possible works of art are limited only by the imagination. The poorest beggar could live in splendor, if careful not to touch. Whatever else, these magical kingdoms are going to glow at night with color and beauty, making our primitive neon efforts look sick.

As long as there are healthy mages in these magical lands, there will be no energy crisis. Light is easy to create through images. For the effects of heat, real fire is available, inexhaustable, and cheap (1 ST pt.). For furnaces and forges where more intense heat is needed, multiple fire spells can be used, or an illusion fire of any intensity can be created.

The people in Cidri are going to be healthy, for *all* their fighting. Aid spells will keep the sick well. Sleep spells would outclass any anaesthetic yet developed. For critical cases, a shield spell might screen the victim from a disease (a kind of thrown spell, after all). The slow movement and freeze spells might be refined by grocers to keep food from spoiling.

By this time I've probably got a crowd of booing warriors throwing more than spells. Grocery magic? Bah! Silliest thing Vodka the Stumbling ever heard of, but with his name, he should talk. If this article seems to be examining something seriously which is only meant to be fun, too bad. If we can add up Ysmog's essence in three columns, we can also consider grocery magic for fun.

Illusions keep bugging me. Extrapolating, one comes up with ludicrous extremes. Imagine whole kingdomes of nothing but illusions. Educate everyone in wizardry, and nobody needs anything he can't dream up in his head. A palace for every couple, a flying galleon for the commuter, and worse ad nauseum. It reminds me too much of Niven's scenario. In his universe, when the mana ran out, all the flying palaces smashed back to the ground and those high and mighty civilizations fell to sword-slinging barbarians who'd never heard of magic, and didn't need or want it. It would be even worse in TFT. The wizard kingdoms would grow so dependent on illusions that they would no longer be able to disbelieve them if they had to. Along comes a barbarian horde, takes one look at those incredible towers hanging in the sky and POOF. The wizards are sitting on so much air. End of the magic civilization. Evolution favors the barbarians through the years. Today we're incapable of believing in magic, so it doesn't exist any more. Sounds likely, doesn't it? But, I don't believe it. People want to believe in magic too much for it not to manifest itself, if it existed.

Surely we can expect hard up wizards to create illusion concubines (and studs of course, gals). What do we call the offspring of such a liason? Is it illusionary, real, or summoned? Perhaps it would be a clone of the real partner, since the illusion can technically contribute nothing corporeal. Can illusions mate? I doubt it would result in offspring (see bottom of page 14 in the WIZARD rulebook). While we're in this area, can illusion food sustain you, even if nobody disbelieves it?

The aid spell bothers me, too. Brian McCue raised an excellent point in TSG no. 22 in his *Three Words*. While it isn't usually practical in small scuffles, with a concerted effort by a large number of magicians, a single wizard could be super-energized until he would be capable of almost anything. He could magic fist a hole through a mountain, teleport around the world, or throw spells requiring superhuman capabilities which the WIZARD spell table couldn't hint at. Extrapolating again, we come up with a rational explanation for gods in TFT. Simply believing in a certain concept, it would seem to me, if powered by enough people, would act as a kind of aid spell. By worshipping Yursomosch and sacrificing to him ritually, it seems like his worshippers would eventually come up with an actual, if magical, manifestation of a fifty-headed fish-god with hundreds of arms and a dozen tails. And Yursomosch would act just as they had imagined him to (he couldn't do anything else, being a kind of illusion), so the people's faith in him would grow stronger, and he would grow stronger, and. . .you get the idea. If enough people believe in Yursomosch, he becomes the strongest god around, attracting even more followers. If two kingdoms have inimical feelings toward each other, their gods fight (being a manifestation of their mass mind) and mythology is born. When the people die out, the gods go away. Very tidy, hmmm? Old idea, too.

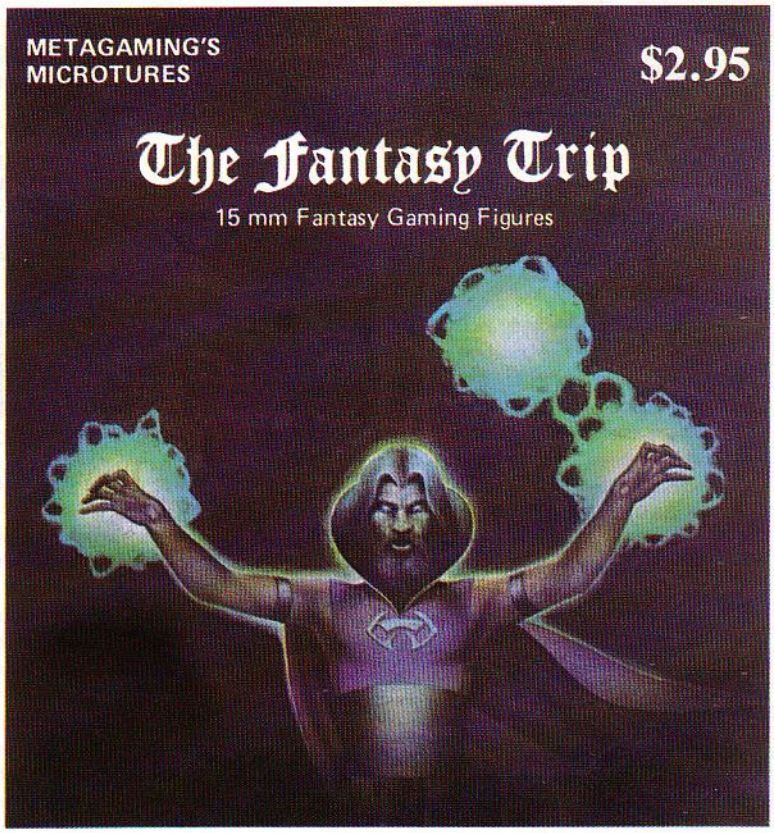
So what are we left with? Cidri, the TFT world, is weirder than anyone expected. On the one extreme, we have sky-dwelling civilizations of super-advanced magic technology which come crashing down if their inhabitants aren't careful to keep their cities invisible from the other extreme, club-toting barbarians who live a crude and pungent existence without magical wonders. Of course, there will also be everything in between, and a travelog would be interesting to say the least. I know one thing, though. As I look around at our grey cities of concrete and steel, our cars chugging along on borrowed time, our blaring electronic devices, our smog, our endlessly breaking consumables, and all our sullen-faced, jaded populations, I advise my quaking warriors, "You guys don't know how *good* you got it!"

New Microture Ad

METAGAMING'S
MICROTURES

OGRE

1/300 scale vehicles



THE FANTASY TRIP

TFT 01 HEROES AND HEROINES ($2.95)
2 ea. Man w/two hand axe, Man w/two hand sword, Man w/bow, Man w/sword, Woman w/sword, Woman w/bow, Woman w/dagger

TFT 02 WIZARDS ($2.95)
2 ea. Clerics, Clerics w/staff, Sorcerer, Sorcerers Apprentice, Sorcerer w/pedestal, Wizard, Wizard w/staff

TFT 03 DWARVES ($2.95)
2 ea. Dwarf w/bow, w/spear, w/axe, w/sword, leather, Dwarf w/chainmail spear*, w/hammer, w/crossbow, w/two hand axe*

TFT 04 ELVES ($2.95)
2 ea. Elf w/sword, Kneeling w/bow, Standing w/bow, Chainmail w/sword, w/bow, w/spear standing
1 ea. Elf chainmail w/spear kneeling, Leather w/spear

TFT 05 LABYRINTH DWELLERS ($2.95)
2 ea. Wolves, Bear, Gargoyles
1 ea. Ogre, Giant

TFT 06 ORCS ($2.95)
4 ea. Orcs w/bow, w/sword, w/crossbow, w/poleaxe

TFT 07 HOBGOBLINS ($2.95)
2 ea. Hobgoblin w/sword, w/scimitar, Standing w/bow, Kneeling w/bow, w/axe, w/hammer
1 ea. Hobgoblin w/polearm, w/poleaxe

TFT 08 DRAGON (ONE HEX) ($2.95)
1 ea. Dragon, Treasure chest, Gold pile

TFT 09 ORCS No. 2 ($2.95)
2 ea. Great Orc w/sword, w/cree, w/axe, w/swordaxe, Standing w/bow, Kneeling w/bow
1 ea. Great Orc w/poleaxe, Commander

TFT 11 LABYRINTH DWELLERS No. 2 ($2.95)
2 ea. Scorpians, Spiders
1 ea. Slime, Mold, Leech

TFT 12 DRAGON (SEVEN HEX) ($7.95)
1 ea. Dragon

TFT 13 HALFLINGS ($2.95)
3 ea. Halfling w/dagger, w/sword & shield, w/sword, Standing w/bow, Kneeling w/bow, w/axe

TFT 14 TROLLS ($2.95)
2 ea. Trolls w/club, w/hammer, w/two hand axe, w/two hand sword

TFT 15 GOBLINS ($2.95)
3 ea. Goblin w/sword, w/axe, w/bow, w/spear
1 ea. Wolf Rider w/axe, w/bow

TFT 16 DRAGON (FOUR HEX) ($4.95)
1 ea. Dragon w/treasure chest, Gold pile

OGRE MICROTURES

OGR 01 OGRE MK V ($6.95)

OGR 02 G.E.V. ($2.95)
4 ea. G.E.V.

OGR 03 HEAVY TANK ($2.95)
4 ea. Heavy Tank

OGR 04 MISSILE TANK ($2.95)
4 ea. Missile tank

ORDER CONDITIONS

Due to the mailing weight of these Mircoture packages, they must be ordered subject to the following conditions:

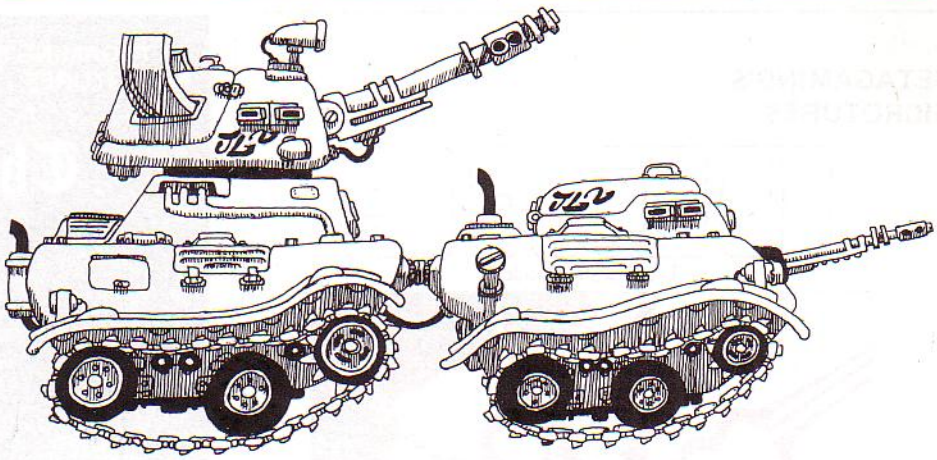
1.) Three Microture packages or more is the minimum order. Orders for only one or two Microture packages will be returned.
2.) A postage and handling fee of $1.00 per order must accompany each order for Microtures.
3.) Subscribers to THE SPACE GAMER are exempt from the $1.00 postage and handling fee.

SOLD BY: Metagaming
P.O. BOX 15346
AUSTIN, TX 78761

MANUFACTURED UNDER LICENSE BY:
MARTIAN METALS
P.O. BOX 388
CEDAR PARK, TX 78613

The Unwritten Rules of **Rivets**

by
Roland Parenteau



RIVETS is a real switch. In most other wargames, the effective strengths of units against one another are immutable, given, undeniable -- a T55 tank unit against an M60 always loses (well, almost always). In those other games, it's up to the players to work with the units and the unit-strengths they are given. That's all the players can do.

In RIVETS, on the other hand, each player *decides* which of his units will be effective against which other enemy units. Not only that, but each player can actually *change his mind* about this fundamental game parameter, right in the middle of the game. This is what makes RIVETS interesting -- and makes pre-game planning difficult, if not downright impossible.

For readers not familiar with the game situation, RIVETS is a game about a battle between two teams of robots. The people have been killed off long ago, but the semi-intelligent robots don't know how to cease fire, so they keep on going. Each player selects his counter-mix from among several different types of robots: Big Boppers, Jack Boppers, Rocket Boppers, Dive Boppers, Light Boppers, and Tiny (pronounced "teeny", of course) Boppers. All the boppers are controlled by the player's Bopper Control and Production Complex, or BCPC for short. The BCPC is also the player's source of replacement units. The object of the game is to destroy the opponent's BCPC.

Before the game, each player "programs" each of the unit-types he has on the board to attack one, and only one, of an opponent's unit-types. For example, I could program my Big Boppers to attack your Rocket Boppers, my Jack Boppers to attack your Light Boppers, and so forth. A given unit can only attack an opposing unit-type it is programmed to attack -- none other. (There are exceptions, but read the rule book to find out.)

A player can re-program any of his units assuming that all the units he wishes to re-program are inside his BCPC.

Combat takes place at the end of each player's turn, after he has moved his units. Any friendly unit which is programmed to attack an enemy unit it is adjacent to does so, by comparing combat factors, reducing the comparison to an odds ratio, and rolling the die. One important point in this game: if the enemy unit is *not* programmed to attack the unit-type that is attacking it, then the attacker resolves the combat one column higher up on the combat results table. This is called the "combat add", and can be a big advantage. It can also be a very unpleasant surprise when you don't get it, but were expecting to.

Given that you are playing a game where you aren't certain which of your opponent's units can attack which of yours, how should you intellignetly proceed? Naturally, since you can't know what your opponent will be up to before the game starts, rigid planning is out. You need instead a set of guidelines and "tricks-of-play" to keep in mind. I can suggest a few.

1) *Keep track of your opponent's units.* This rule can be divided into two sub-rules: (a) keep track of which of your opponent's units is attacking which of yours; and (b) keep track of how many units of each type your opponent has remaining, and where they are on the board.

Rule 1(a) seems obvious, but is worth discussing. The only ways you will obtain information about which of your opponent's units are attacking which of yours are by attacking his units, and noting which ones give you a combat add and which don't, or by allowing your opponent to attack your units. Whichever way you get the information (you're likely to get it both ways), don't waste a shred of it. The only way to estimate the likelihood of success of any offensive you want to make is to know what your opponent has in the neighborhood that can attack your units.

Rule 1(b) is a little less obvious, but nevertheless, important. There are situations when you may not want to destroy your opponent's last remaining unit of a certain type. If you destroy it, he gets to re-program that unit-type with his next replacement -- and that might not be to your advantage. If you don't destroy it, on the other hand, your opponent may return his unit to his BCPC and re-program it anyway. Or he may advance it to do whatever his lone unit can do. It'll help your chances if you know what his options are.

2) *Use as varied a force as possible.* This rule, too, can be divided into two sub-rules: (a) especially when advancing on the enemy BCPC, try to have several different unit-types around, instead of just one or two; (b) don't overdo the number of your unit-types programmed to attack one unit-type of the enemy's. You'll lose the combat add, and therefore the advantage of numbers, more frequently. What's more, some other unit you haven't programmed against will more easily get through and do you damage.

3) *Don't be afraid to destroy you own units.* Few things are more frustrating than wanting to re-program a unit-type to do something useful, but having one little remaining unit louse up your plans and require several turns to make it back to the BCPC. What is the answer to this problem? A poor-odds, sacrificial attack -- after all, these are just robots, remember?

That just happens to be one of the things about RIVETS I find especially entertaining and liberating -- there are no *people* involved in any of the combats. All the historical games from Avalon Hill or SPI, and even the other MicroGames, involve people: people riding around in spaceships, tanks or whatever; or people walking around as infantry, or as just plain people. As a wargamer-with-a-heart, I find it very difficult to justify sacrificing these "peopled" units except under extreme circumstances. I'm just not the kind of guy who can advance a truck unit into the line-of-fire of a whole townful of tanks just to spot their fire. In RIVETS, though, I don't have a problem -- like the back of the rule book says, "What else can you expect from robots with the average intelligence of an electric can opener?"

4) *Use your build points carefully.* There's no point in turning another Jack Bopper loose on the board when you have only one other Jack Bopper left, and its only got one target -- unless the target is a Big Bopper that's programmed to attack your Jack Boppers, and you need the extra unit to improve your odds. Barring that, a wiser course might be to bring the remaining unit back to the BCPC, then re-program both units and unleash them all at once. An opponent with an "unbalanced" threat (see Rule 2) can get a nasty surprise that way.

5) *Have fun with it.* This reminder should go at the front and back of the rule book of every MicroGame. The game is short and plays several times at a sitting. Explore variations. Treat it like you would a game of chess -- after a couple of King's Pawn openings, try Queen's Pawn, then try the Sicilian, maybe the French Defense, and so on. You can't consider yourself experienced until you've tried a lot of variations.

And don't make winning or losing a big deal. I'd much rather lose an exciting game (and start another one immediately) than win a game which cost me a month's worth of Friday nights. Life's too short.

Letters to the Editor

Let me publicly thank Lynn Willis for responding to my review in your magazine--a reviewer, like a game designer, needs comment and criticism.

As requested by Mr. Willis, here are my concerns about the Supply Rule, stacking, and supply trains in general:

The stacking limits are imposed because of the "difficulty of supply". Why then do the supply trains only increase the stacking limits during combat? The whole matter of combat and non-combat stacking limits is not dealt with in sufficient detail -- I am somewhat lost.

Only two supply trains are allowed in one hex per player. What happens if a player who already has two trains in the hex captures a third or fourth?

There are no rules for deploying the supply units at the beginning of the game. Do we handle it like the hereditary artillery, or must all units be purchased? Can a rich player really "buy up" all the world's supply trains?

Supply counters have a combat factor. If a hex containing a sole supply train is entered by enemy forces, what happens? Combat? Automatic change of control, since supply units are "indestructable"?

Why do the supply trains have a combat factor? Does this mean that a desperate player can launch an attack with only supply trains? Can supply trains fight each other?

Supply trains raise the stacking limit in combat. What if losses occur--can the supply train be taken as a casualty, and if so, what happens to the over-stacked units when the stacking limit decreases?

This is obvious, but perhaps you should specifically state that supply units do NOT raise stacking limits of transport units like arks.

I also suggest that all rules pertaining to supply units be placed in the Supply Rule section. The combat and non-combat stacking limit business, for instance, is only mentioned in the Stacking Section, Basic Rules, pg. 2, while the other rules are in the Advanced Rules, page 9.

I also have a few minor points of irritation: Why are supply trains indestructible? Can't I at least have a die roll to see if I destroy my supplies before the enemy gets to them? Why are supply trains as fast as most armies? Why do supply trains cost the same to purchase for every player, when the Transwyoming country particularly should find it easy to locate draft horses (after all, they find it easy to get cavalry for the army)?

Almost all of these questions can be solved by an individual wargamer, but I look forward to having the game's designer provide universal solutions. It is a little nicer when everyone is playing by the same set of rules.

W. G. Armintrout
Tooele, UT

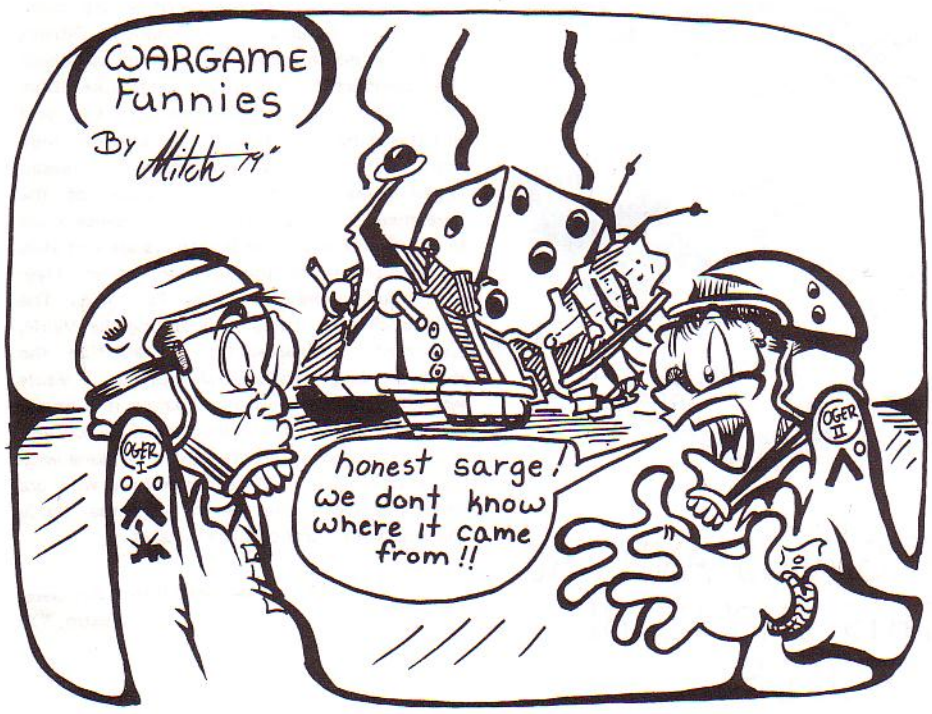
I have just read Howard Thompson's editorial article in The Space Gamer no. 24. While I do not feel that editorials should be written while under the influence of a severe hangover, I do concede that your position in that article might have some slight justification. For that reason, I wish to repeat the anecdote which follows:

During the second world war, an Army recruit arrived on Guadalcanal at the height of the operations against the Japanese. Flushed with ferocious patriotism, he demanded of an old sergeant: "Where are Nips?--I want to KILL!" The sergeant pointed to a grassless knoll one hundred yards beyond the front lines and said: "Son, you go up on that hill there and shout 'Hirohito sucks turds' real loud about three times and you'll be able to kill half the Japs on this island." The recruit went off. About fifteen minutes later, the recruit came running back to the sergeant, who asked: "Well, how many Japs did you kill?" The recruit panted: "Sergeant, I went up there and yelled just like you said, and all of a sudden this little yellow fellow with buck teeth, thick glasses, and a two foot pig-sticking bayonette on the end of his rifle jumped out of the grass and came at me screaming "Roosevelt is a bastard!" -- and I came back here just as fast as I could 'cause I could not bring myself to shoot a Republican."

Some people think life's a lot like that, you know, Howard.

A fast comment on the psychology of gamers: Lawyers visit their mistakes in jail, doctors bury theirs, and good gamers laugh their's off; gaming is the adventure of making decisions and not having to worry about the consequences because cardboard does not bleed. Little more than that should be made of the entire hobby.

Jeff Tibbetts
Oakland, CA



As a novice to the gaming field I found Mr. Thompson's article in TSG no.23 rather interesting. In "Where We're Going, he suggests that gamers use more literate tastes in buying games. I would like to suggest to Mr. Thompson that it is rather hard to buy wisely, unless. . . . there are competent reviews of games in magazines *like* The Space Gamer or The Dragon; much like the review of QUAZAR in that same issue. Or the buyer, in the sense of caveat emptor, trys a new game by buying it.

In addition, my companions and I happen to enjoy fantasy-role playing type games; however, we try to be judicious in purchasing *quality*. If anything, we tend to be conservative when it comes to buying new material. We have gambled, successfully, several times, but only after much forethought.

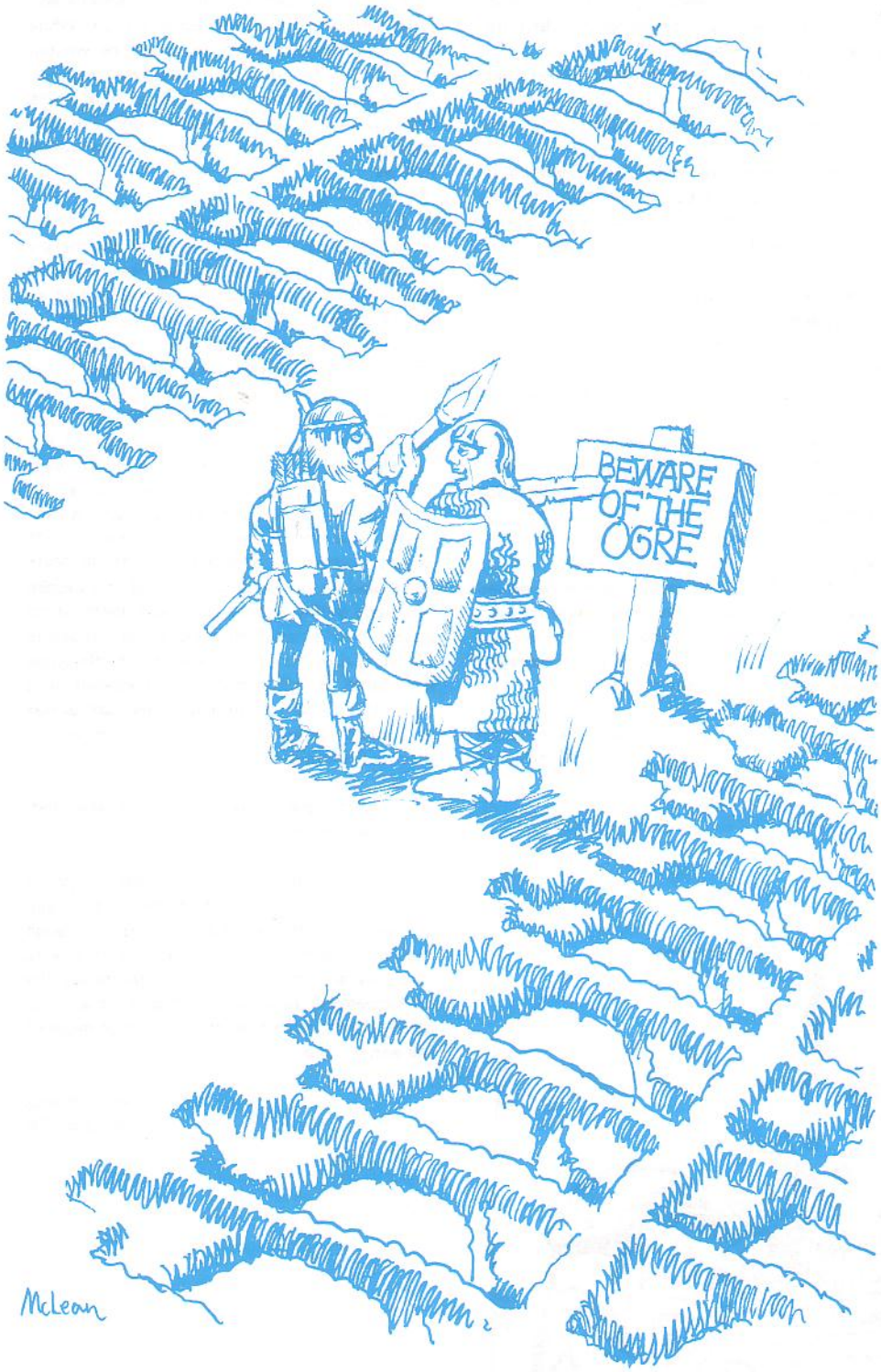
Brian McCue's article, "Know Thyself: a system of personal evaluation for T.F.T." struck me as a rehash of several past systems for realism in role-playing that the TSR people have printed. Of course, Mr. McCue came at it from a different tack, but it was nothing new or exciting.

Neill E. Frizzel has a much better grasp of the Deryni than Mr. Pehr. Consequently, I enjoyed it much better. I can only suggest to Mr. Pehr that he read all the material available on the Deryni before he claims that they are chaoti evil. The Deryni are merely 'gifted' humans and possess the same social graces as the rest of the human race; i.e. -- the ability to be good. Mr. Frizzel suggests limiting the number of active Deryni, but he, and DM's, should keep in mind that the Deryni comprise a race of people. Also, they are a rather close-knit people who are highly pro-Deryni; if they do not tend toward bigotry against non-psionic humans.

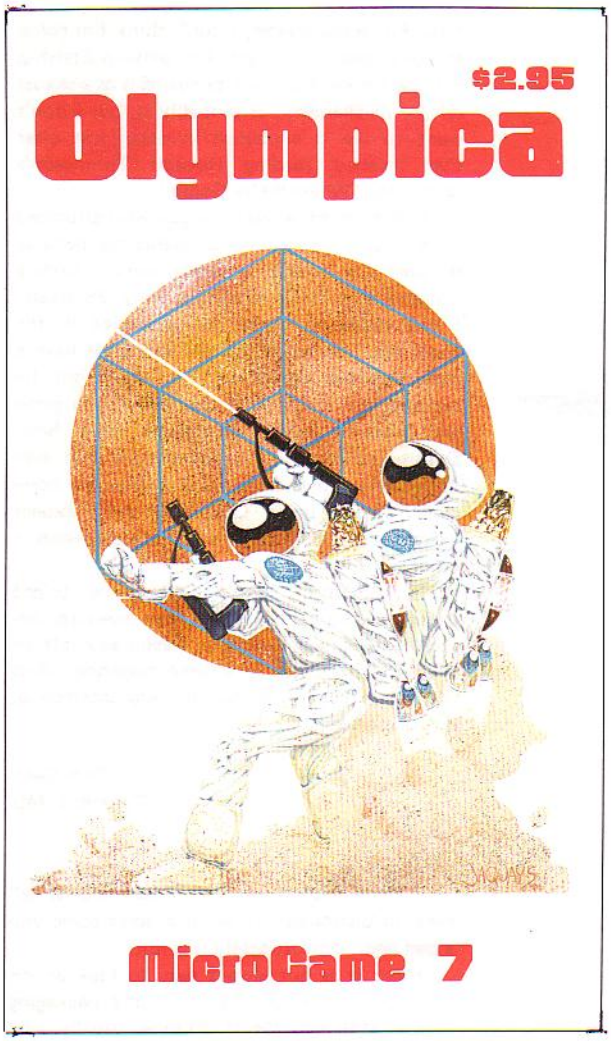
I liked the review of QUAZAR. I thought there were adequate reasons given to shun the game. However, it reminded me of a review of games done by the college 'zine, *Ampersand*. The critical editors of *Ampersand* panned everything but games that a two year-old could master. Then the reasons they gave for staying away from good games went from taking over an hour to play to a rule book with forty-odd pages. I'm not suggesting that Mr. Armintrout falls in that category but his article hinges on having that impression come to mind. Perhaps, his article could have been tinged with a little less sarcasm and carping; yet have the same effect of cautioning buyers.

Mr. Pehr! Please. I don't want to focus on you, and the rest of the contributers to The Space Gamer, negatively; yet when you suggest Valde wizards I must protest. I believe that in trying to create a schema for including book characters into TFT you sacrifice too much for the sake of universal acceptance. Dibell's Valde *are not* human. They share humanoid characteristics but they are more like elvish folk. The Valde are reluctant to kill, yes! But this reluctance is due to the empathy they share for the living creatures. The reason Dibell gives for the extermination of the Screamers is: the Valde do not sense souls in the Screamers. The Screamers are not alive to their sense, and therefore anathema. Then you focus on the dueltrance. Tsk! Tsk! The dueltrance is a special rite among the Valde, and must be prepared for. In addition, the duels are fought in concealed privacy -- Valde warrior to Valde warrior. I know it is unreasonable to suggest that adaptions of the Deryni, the Valde, and others like them be done with more discretion; with other writers who are unfamiliar with the Deryni and the Valde making them chaotic-evil or wizards.

Lawrence Henry Apodaca
Austin, TX



BOY, AFTER THAT PAIR OF GIANTS AND THE NEST OF GARGOYLES, THIS SHOULD BE A REAL PUSHOVER

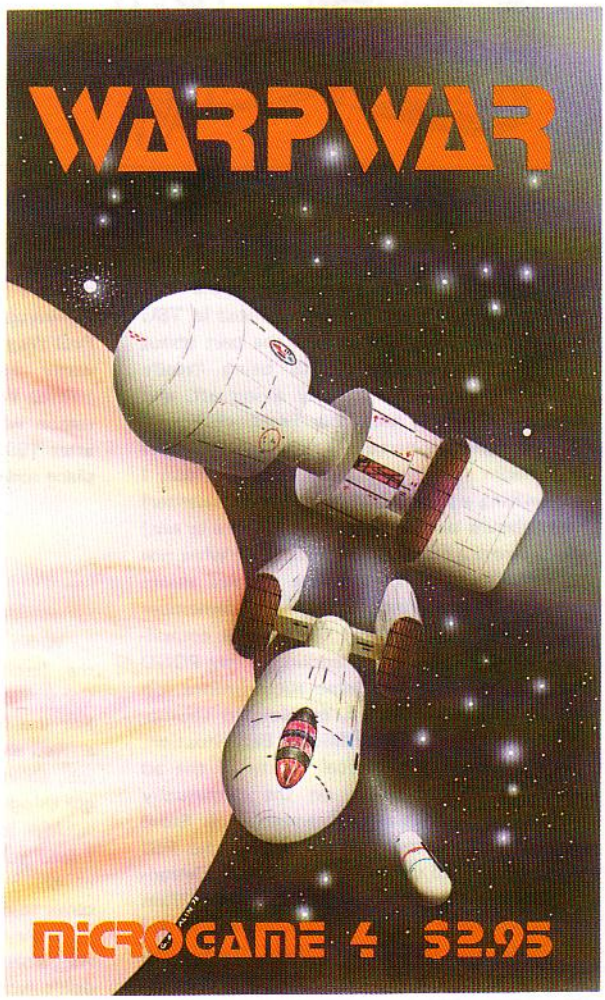


THE WEBBIES WANT YOUR MIND. . . .

OLYMPICA simulates the U.N. Mars raid to capture the Web Mind Generator from a heavily defended area near Nix Olympica's massive caldera. The Webbie revolutionaries are deep in their tunnel complexes surrounded by strongpoints and infantry. The raiders will use infantry, laser tanks, lifters and the tunnel busting BOAR drill. If they fail man's future may fall to the telepathic, religion/machine Web Mind of Mars.

OLYMPICA is the clever tactical creation of Lynn Willis. His future history of the Martian revolution of 2206 hinges on the crucial U.N. raid. The game is easy to learn, fast playing, and challenging. Like the other MicroGames, it is ideal for beginners and fun for pros. OLYMPICA is the perfect game for those who've never tried science fiction games.

Components include:
- *24 page rules booklet
- *8" x 14" map
- *96 unit counters



TACTICAL SPACESHIP DESIGN AND COMBAT. . . .

WARPWAR is a game of interstellar maneuver and tactical combat. Players design their own ships with offensive, defensive, and movement capability. Ships move through space -- or jump along the warplines that connect certain stars -- to gain control of enemy base stars.

WARPWAR uses a unique diceless combat system. Each player selects movement and combat allocations for his units. No chance is involved. . . you must outguess your opponent.

Advance rules introduce Systemships and a technology factor which gives newer ships an advantage in combat.

Components include:
- *24 page rules booklet
- *8" x 14" map
- *56 unit counters

OLYMPICA and WarpWar are available at your local hobby, toy, or book stores--ask for them. Both are $2.95 when ordered from Metagaming. Subsribers to THE SPACE GAMER pay $2.50. Each order requires a 50-cent postage charge.

Metagaming
Box 15346, Austin, TX 78761

Please inform your readers that they may have gotten an incorrect impression of me from my letter (or excerpts thereof) printed in TSG no. 22. All you printed was the part about TARTARS AND MARTYRS being "really dumb," MicroGames possibly dying off, and the parts saying "I hate your Feedback Form" and "I hate the name Microtures." Readers who might infer from these selections that I was writing a poison-pen (or poison-typewriter) letter should be told (whether they care or not) that I wrote a much longer letter than what was printed, which had a number of nice things to say. For instance, I distinctly remember making really polite and tactful and complitary comments on your handling of my POND WAR piece, on MicroGame subscriptions, on the art you're publishing, on Howard Thompson's opinions about the Middle East situation, on the brilliant syntactical clarity of the ad copy for HOLY WAR, on the perpetually amazing proofreaders you employ, on Steve Jackson's checkered past (I assume the FBI hasn't caught up with him yet), on Ben Ostrander's quite valid reasons for concealing from everybody what the C in his name stands for (I understand, it's all right, there, there), and most importantly on TSG's reliable punctuality. *Better* than punctual, in fact -- my copy of no. 22, the March-April issue, arrived May 29, fully 24 hours before I expected it.

And to prove I haven't run out of complimentary things to say, I should tell you that I enjoyed all the articles in no. 22, particularly Paul Wagner's PARTY BRAWL, which I found vastly entertaining. Less satisfactory was "Three Words", mainly because I could see no reason why Brian McCue had to set his story after 1992. It could just as easily have taken place today.

Allen Varney
Reno, NV

When I opened my mailbox today and saw the familiar white envelope with my Space Gamer inside, I was amazed. Just imagine! For the first time in recent history, TSG had arrived early! I didn't see any signs of a rushed job, either, which lets me hope you've finally got things in order down in Austin.

My joy was short-lived, however, when I read some of the articles in no. 24. Instead of being happy and content after reading it cover to cover, I was depressed.

I play wargames--especially science fiction wargames--to forget about the real world. I don't want to be reminded that the U.S. inflation rate is nearing 15% or that the Russians are taking over the world or that Western Culture is on the ropes. I look forward to receiving my Space Gamer because it is supposed to deal with games, which are supposed to be fun. For some reason, I don't think I'm going to have nearly as much fun playing Starship Troopers now that I will be seeing it as a sexual release mechanism. It probably is, but I don't want to see it explained in detail just after I've finished reading Howard Thompson's depressing "Where We're Going".

And then there was the guy who criticized Ogre, one of my all-time fun wargames, because it wasn't a totally accurate armor warfare simulation. Three blows in only 28 pages! I was ready to throw the magazine in the trash can. So what if Ogre and GEV have a move-then-fire sequence? It may not be realistic, but it fits with the rest of the game and doesn't overly complicate play flow. Despite its faults, I doubt whether I've ever played any games more exciting than the now-cliche "lunch break Ogre". I don't expect extreme realism from a MicroGame--and I don't want it.

In retrospect, there were some bright spots in TSG no. 24. The four howitzer defense article was superb--a classic example of what I want to see in a game magazine. And the Black Hole introduction was interesting, if nothing else.

Tom Geen
Columbia, MO

I really wish it were so "black and white" easy to distinguish between a good game and a bad one. Unfortunately it is not.

First, it is not always easy to look at the rules before the purchase. If the packaging doesn't stop you the storekeeper usually will. And I can understand them not wanting people rooting through their games.

Second, even if you could read the rules before hand it might not be of much help. It takes at least two readings, of most games, to understand how everything works. Even then, I've read ambiguous or uneven rules that, when played out, are quite acceptable.

You can't even rely on a friends opinion, since his personal tastes might influence his evaluation. I've played many games that are good playable games but I don't give them my recommendation because *I* don't like the subject matter.

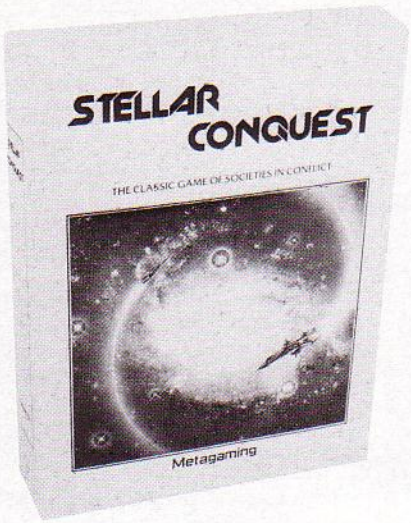
The best way to buy an unknown game is a combination of all the above. Play the game if you can but if you can't, check with friends, try to read a copy of the rules, even look for printed reviews. But don't forget what I think is the *single* most important factor--the designer and publisher. If you have had good luck with them before and know that they are dedicated to good material then they probably won't let you down. If on the other hand you have had bad experiences, don't buy it. They were probably just out for your money and have not changed since their last game.

This is where you Metagaming people have my vote. I have yet to see a shoddy job come from you and I don't think I will. That is why a $30 price tag on TFT: ITL won't phase me a bit. I know it will be worth it!

Wayne F. Cummings

STELLAR CONQUEST

A classic science fiction game... available again! Fight for control of a globular cluster — build, research, and explore. Victory will go to the player who makes best use of the available resources to outbuild and outguess his (or her) rivals.



The new boxed edition of STELLAR CONQUEST includes 480 counters, 17" x 22" full-color map, rules book, star cards, data sheets, and record sheets. The price is only $12.95 – $11.50 for THE SPACE GAMER subscribers.

Game design by Howard Thompson; cover art by Kelly Freas.

When it first appeared, GODSFIRE was hailed as the best political/economic SF game ever designed. Now in a new boxed edition — complete with beautiful full-color cover by Rick Sternbach and enough components for 8 players — GODSFIRE is a "must" for the skilled gamer.

GODSFIRE is two games in one. The basic version is a battle game, with space fleets and ground forces fighting for control of fifteen planets. A unique movement system makes true three-dimensional movement easy.

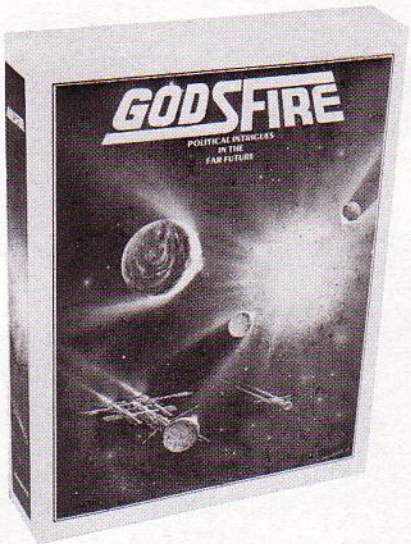
The advanced game adds diplomacy, subversion, politics — and the chance of Armageddon. Before you go to war, you'll have to gain support from internal political and economic interests (by fair treatment, negotiation, bribery, or force) — or face revolution.

Components include two giant 22" by 34" strategic maps, 15 System Sheets and 6 National Government Sheets; 960 unit counters; 616 Gigabuck counters; and the rule booklet.

Playing time ranges from two hours to all day, depending on the scenario (from 2 to 15 players) that you choose.

Designed by Lynn Willis; edited by Steve Jackson; cover art by Rick Sternbach.

GODSFIRE sells for $15.95 — or $14.00 for The Space Gamer subscribers.



GODSFIRE

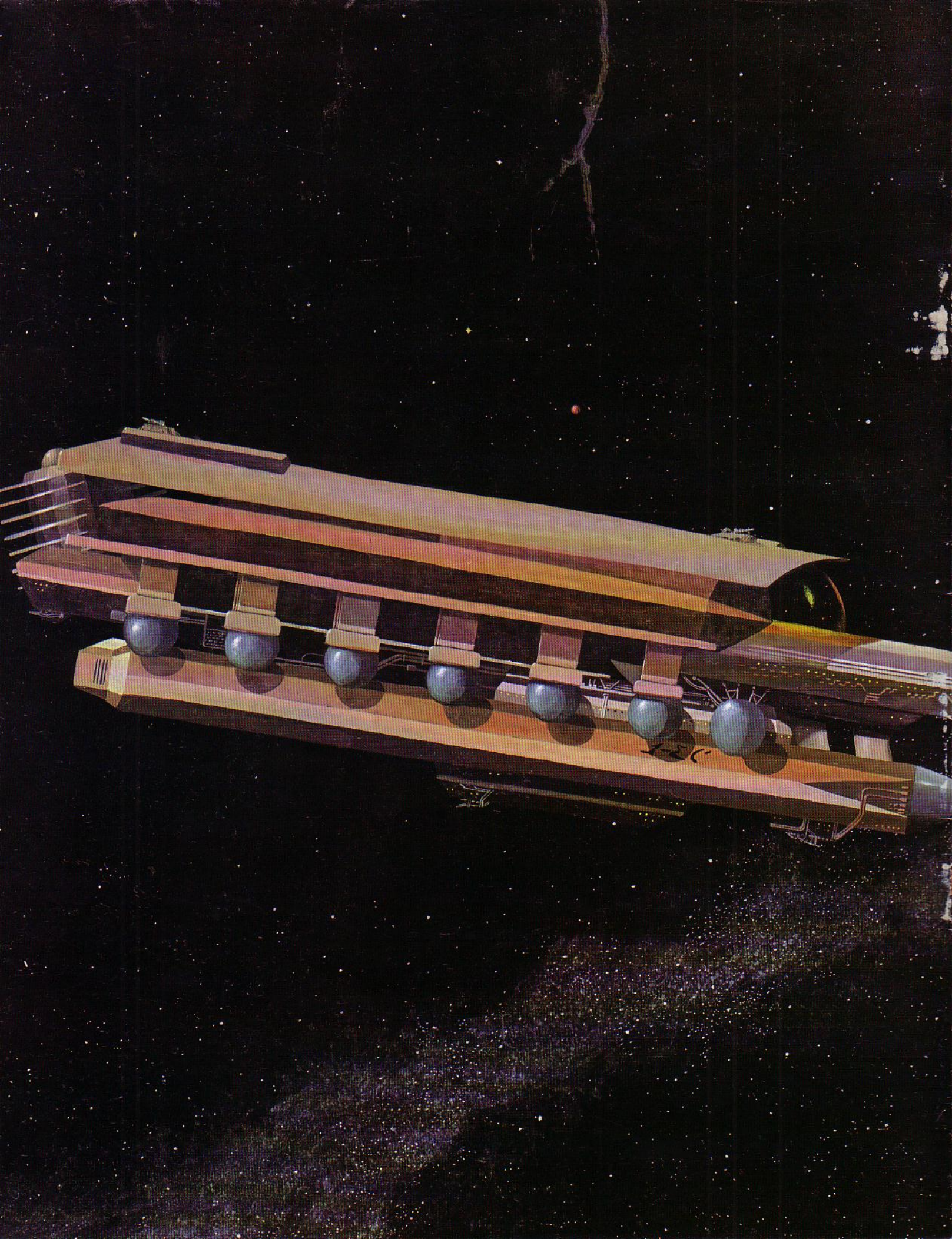
Please send me ..... copies of STELLAR CONQUEST at $12.95 each ($11.50 for THE SPACE GAMER subscribers) and ..... copies of GODSFIRE at $15.95 each ($14.00 for TSG subscribers). I (am) (am not) a TSG subscriber.

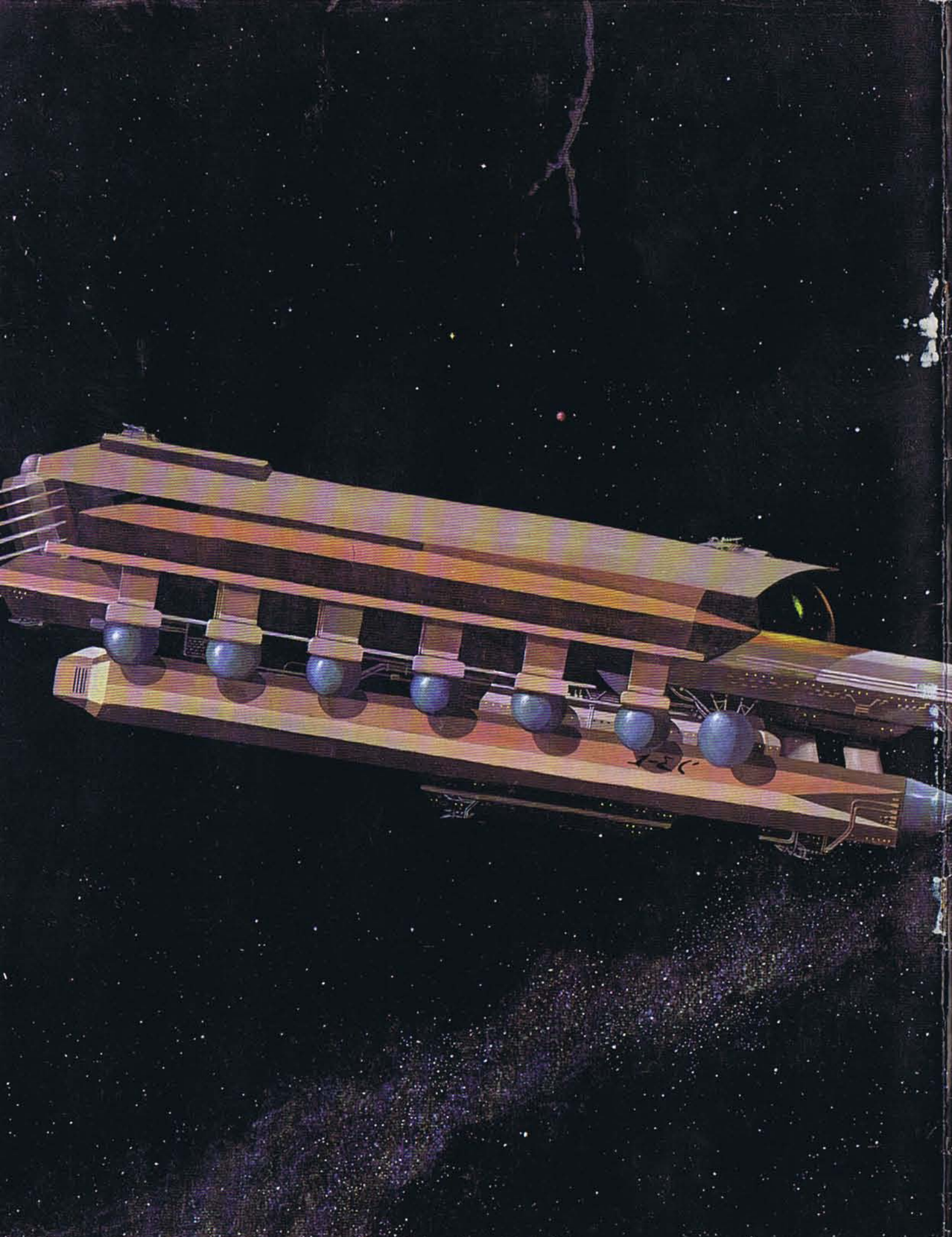
Please enter my subscription to THE SPACE GAMER for ..... months, at $8.00 for 6 issues or $15.00 for 12 issues. I understand that this subscription entitles me to the subscriber discount on games I am ordering now.

Name.....Address.....City.....State.....Zip.....

Please add 50 cents for postage and handling.

Metagaming **Box 15346 Austin, TX 78761**





NUMBER 25 $1.50

THE SPACE GAMER

for creative adventures

SPECIAL STELLAR CONQUEST ISSUE